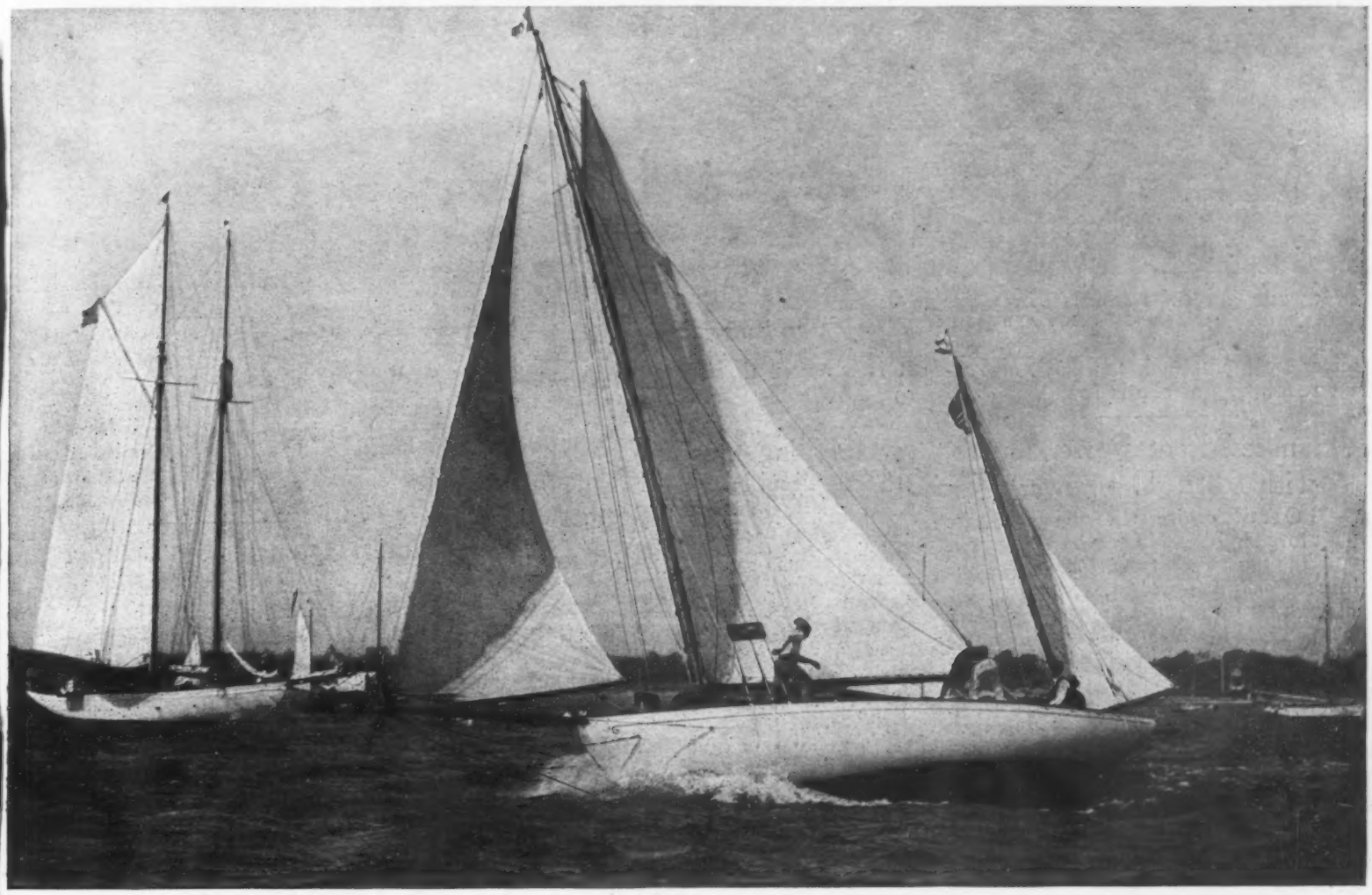
YACHTING

VOLUME XVIII, NUMBER 1 JULY, 1915

15 Cents a Copy
$1.75 a year



THE NORTH ATLANTIC FLEET PASSING DOWN THE HUDSON ON ITS WAY TO SEA DURING THE RECENT REVIEW IN NEW YORK HARBOR

UNDER WAY. WHEN HER HEAD PAYS OFF, THE SAILS FILL, THE JIB IS SHEETED IN AND THE BOAT GATHERS HEADWAY, EVERYONE IS ON THE JUMP

Keeping Track of Position in Beating to Windward

INSTEAD of going to the trouble of constructing a traverse table to keep track of their position when beating towards their destination in cruising or in long-distance racing, skippers sometimes keep their original true course by sailing a certain amount of time on one tack and an equal amount of time on the other. Here is a more accurate method:

Starting your beat on a line between your point of departure and your destination, that is, on what we will call the line of your original true course, and having sailed a certain distance on one tack, you wish to know how far you should sail on the other track to put yourself back on the line of the original true course, you may do so by the following method:

If you are making good a course of four points on the wind (which is a fair average for a sailing sloop), the second tack will make with the first tack a right angle, and the length of the second leg should be the distance sailed on the first leg multiplied by the natural tangent of the angle of divergence on the first leg. The angle of divergence is the angle between the course sailed and the true course to destination. For convenience we give a table of natural tangents by points:

Angle of Divergence.	*Natural Tangent.*
1 point	.20
2 points	.41
3 points	.67
4 points	1.
5 points	1.5
6 points	2.41
7 points	5.

If you wish to figure by half or quarter points you can interpolate.

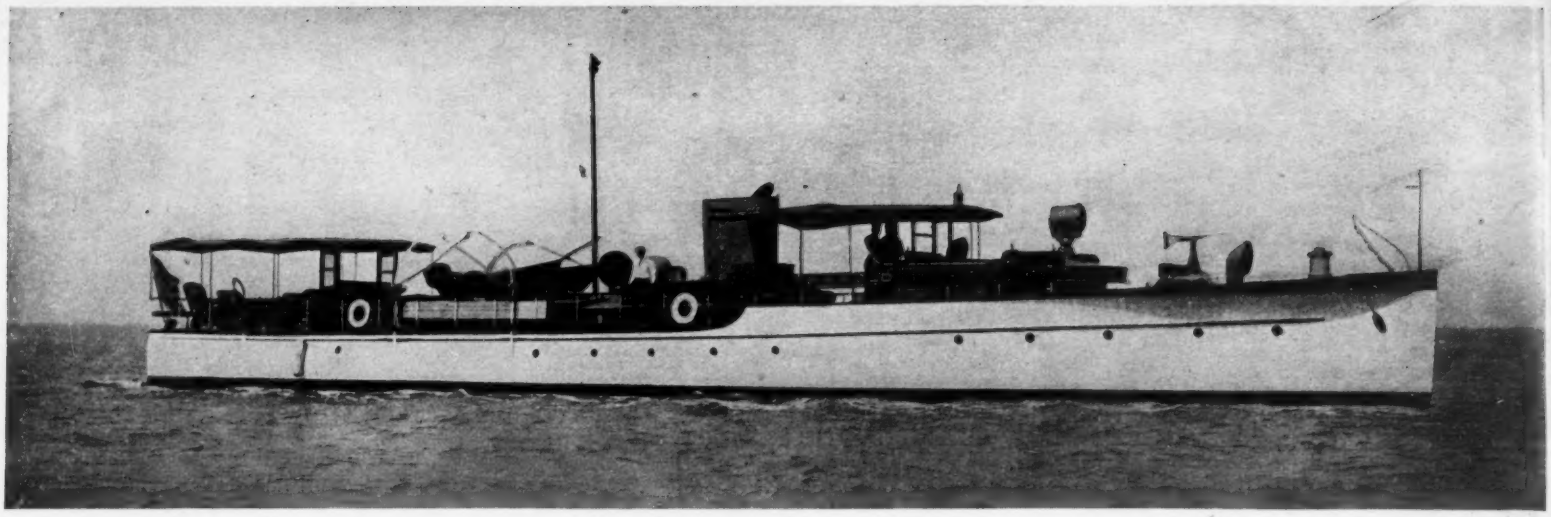
If you are not quite making good a course of four points off the wind, the tangent can still be used with only a small error.

The process repeated enables you to keep your relation to the line of your original true course. It is merely a process of keeping track of where you are and does not affect the method of sailing.

If you have no log in the water to keep your distance, your speed can be estimated at regular intervals and averaged.

Slip of Propellers

THE slip of a screw propeller is the difference between the pitch of the screw and the distance the vessel actually moves during one revolution of the propeller. The word "churning" is used quite loosely and often inaccurately in speaking of propellers that are not working efficiently. So-called "churning" of the propeller is, of course, merely excessive slip of the wheel, which sometimes runs up to 50 per cent. Excessive vibration is not necessarily an indication of slip or churning, as is often supposed, but may be due to a variety of causes. It may be caused by the fact that the blades of the propeller are not of the same pitch, that one of the blades is bent, that the shaft is bent, to a worn stern bearing, or even to the fact that the motor itself is not properly balanced or that one of the cylinders is not firing. The normal slip of a motorboat propeller is from 15 to 30 per cent. Anything over the latter figure would indicate excessive slip and lack of efficiency, and probably an improper wheel. The best way to remedy this is by changing the wheel, trying one of a greater



WITH THE FINE LINES OF A DESTROYER, THE 100-FOOTER MAROLD REPRESENTS THE LATEST DEVELOPMENT OF THE EXPRESS CRUISER. WITH THREE SCREWS AND 900 HORSEPOWER SHE IS EXPECTED TO ATTAIN A SPEED OF OVER 30 KNOTS AN HOUR

diameter or more pitch until a more efficient percentage of slip is found.

A Hundred Foot Power Cruiser with 900 Horsepower

A POWER cruiser with the speed of a torpedo boat and 900 horsepower is the most recent development of the high-speed express-cruiser type for the yachtsman who wants to travel on the water as fast as he can tour on land with an automobile. Comfortable cruising accommodations, consisting of a dining saloon, a lounging room which can be converted into two single staterooms, and owner's stateroom, bathroom, a galley with refrigerating plant, and all the conveniences of a large yacht, with a speed of 30 miles per hour, are combined in 100 feet of length in the Marold, a new boat which has recently been designed by J. H. Wells for Mr. C. Harold Wills, of Detroit.

Although roomy and commodious in her interior accommodations, the narrow beam of but 12½ feet in proportion to the length of 100 feet shows at a glance that speed was a leading factor in the designing of Marold. The freeboard is raised forward with pronounced flare and the quarters have tumblehome, giving the yacht something the appearance of a torpedo boat destroyer. But although speed is one of the chief considerations the boat possesses good seagoing qualities for this type and is intended by the owner for extensive cruising, including the frequent crossing of the Gulf Stream between Florida and the Bahamas.

The speed factor has been amply provided for in the power plant, which is noteworthy. Marold is provided with triple screws which are driven by three 300-horsepower heavy-duty-speed Sterling engines. These engines are of eight cylinders each and are designed expressly for this type of boat and for naval craft used in coast-defense work. They develop the rated power at 1,000 revolutions per minute. The central engine is installed farther forward than the other two, and the controls of all these are centralized in a position between the two outside motors. It is expected that Marold will develop a speed of better than thirty knots.

Tripping Line for Anchor

To keep your anchor from getting caught and to make it easier to free from a rocky bottom, it is a good plan to attach to the back of the crown or the bottom of the shank a small tripping line with which to clear or lift out the flukes. This line should always be paid out so as to allow plenty of slack and thus prevent any strain on it from tripping the anchor accidentally. The end of it can be moored by a small float if it is not long enough to reach the deck with a good scope of cable paid out.

Keeping the Engine Clean

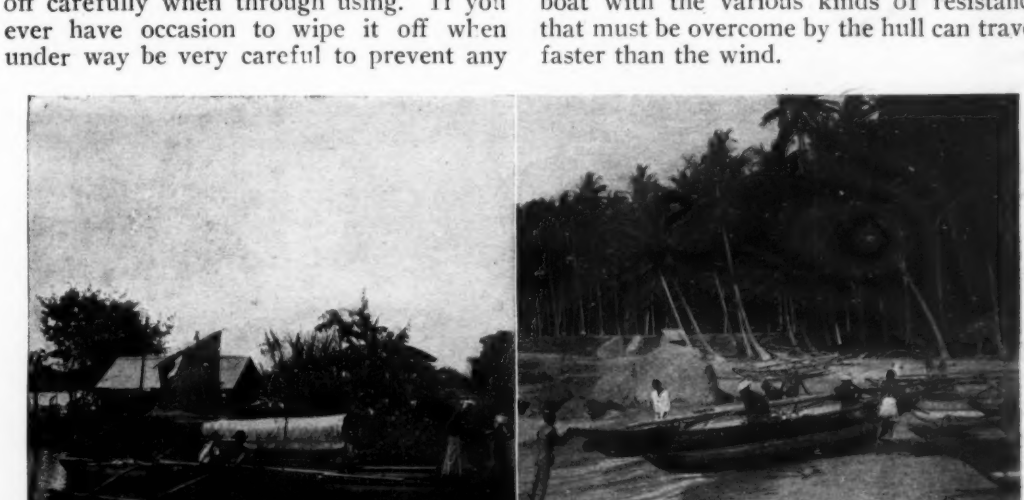
To keep the power plant in good shape it should always be wiped off thoroughly when through using each time. It is best to do this with a piece of waste dipped in oil, which will prevent rust on the unpainted parts of the motor. Don't let an engine stand and become clogged with accumulated oil and grease on the outside, but wipe it off carefully when through using. If you ever have occasion to wipe it off when under way be very careful to prevent any cloth or waste getting caught in the gears or drawn into the air intake valve of the carburetor, as this may do serious damage. When through with an engine don't forget to throw out the switch so as to prevent any chance of using up battery current.

More Arguments on Going Faster Than the Wind

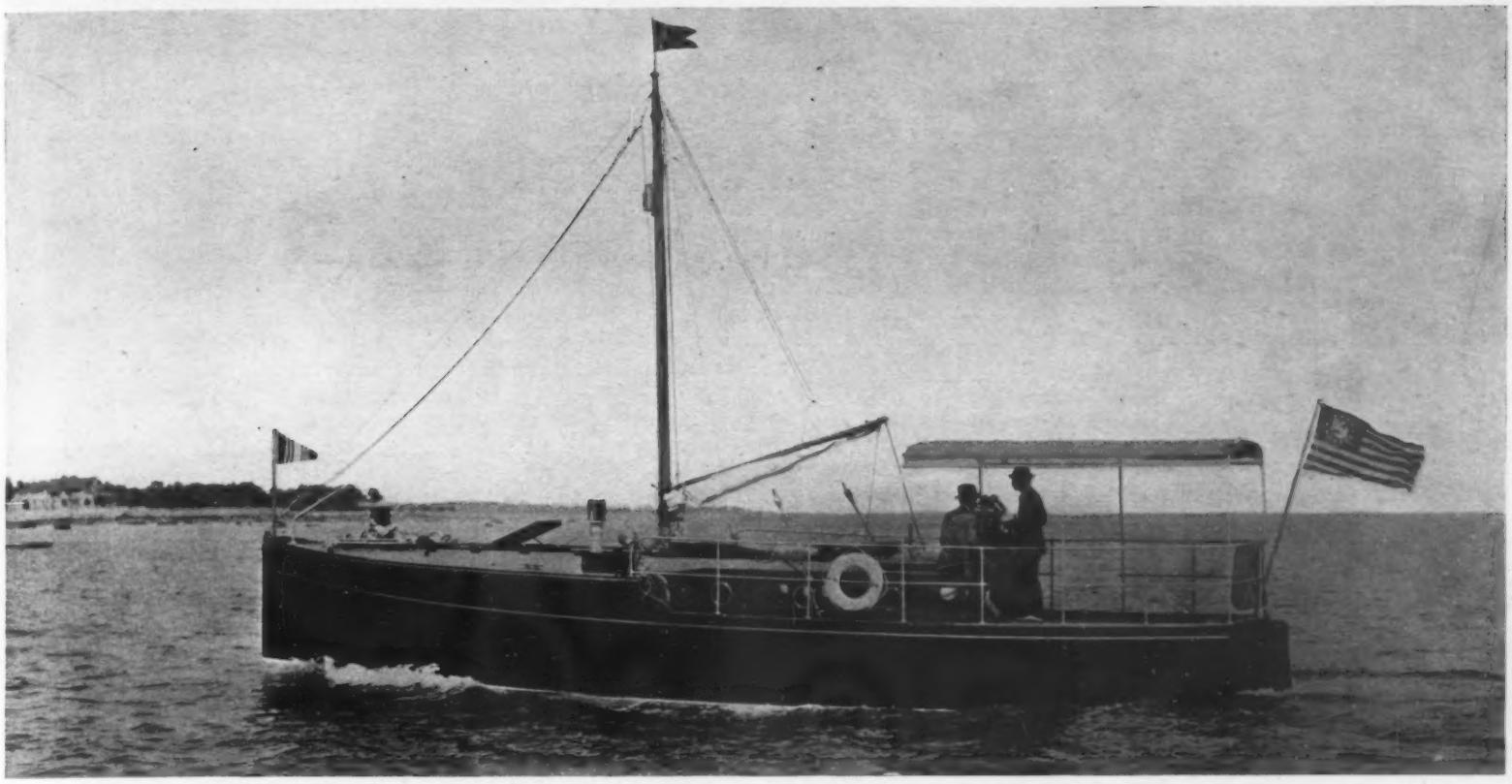
I like to give my opinion about the argument, "Can a Boat Go Faster Than Wind?" I have sailed in Switzerland on Lake Zurich for over five years on a so-called 45 square meter, keel yacht, which boats are about 33 feet overall and have 2,000 pounds lead on keel. I often had a chance to see that these boats went sometimes faster than wind as compared with smoke being blown from steamers or from the shore.

A. W. GLENCK.

We think you would have to take a little more reliable data than that. You had no way of actually measuring the speed of the smoke and the air current at the altitude of the smoke might have had a different velocity from the air current in which the boat was sailing. We don't believe a sailboat with the various kinds of resistance that must be overcome by the hull can travel faster than the wind.



QUEER CRAFT OF THE FAR EAST. CEYLON OUT-RIGGER CANOES USED ON THE COAST AND LAKES



CERO, A REAL BOAT, DESIGNED ESPECIALLY FOR OCEAN RACING AND CRUISING. SHE HAS GOOD DISPLACEMENT, PLENTY OF DEAD-RISE, AND CAN CARRY FUEL FOR 1,200 MILES WITHOUT OVER-LOADING

Around Long Island in an Easterly Blow

BY HERBERT L. STONE

IT must not be thought from the title of this that we deliberately went to sea in the face of an easterly gale. Every good sailor, when caught off shore in a blow, will stand and take it as cheerfully as may be, if he can't duck in anywhere; but none of them will deliberately go to sea in the face of a gale if he can help it. So it was with us on the Cero; and when we pulled out from Echo Bay, New Rochelle, about seven o'clock on the evening of Tuesday, June 1, the sea was calm and there was no indication by the glass, or otherwise, that before daylight storm warnings would be flying from the Middle and North Atlantic weather-bureau stations, and that shipping would be cautioned to stay in harbor until the easterly gale sweeping up the coast had blown itself out.

The wind was moderate S.W. and the sky cloudy and overcast when we took our departure from Premium Point buoy at 6:45 P. M., bound on a non-stop run around Long Island, with Gravesend Bay as our destination. This was to be, in a way, the official trial trip of the Cero, a new 40-foot power cruiser built especially for the Bermuda Race and launched a few days before. The Bermuda Race had fallen through, owing to the builders of the Cruisette, the only other entry, failing to make good on their much-heralded challenge; but as Cero was built especially for ocean racing we wanted to try her out under real ocean conditions. We did it, all right, before we got past the sheltering arm of Norton's Point.

Our little ship was loaded with her full equipment and fuel supply for the Bermuda trip. This consisted of 420 gallons of gasolene in permanent tanks, capable of taking her 1,200 miles; 200 gallons of water, 350 pounds of ice, 150 pounds of coal and over 400 pounds of provisions, both dry and wet. In spite of this, while deep and drawing nearer 4 feet than her designed three and a half, she was not over-loaded and did not seem abnormally deep in the water. The engine was one of the new 2-cylinder, 4-cycle Mianus machines, 6-inch bore and 8-inch stroke, and rated at 16 horsepower. We came to the conclusion, before the trip was over, that we were getting much more power than this rating.

There was a three-foot rail around the flush deck aft, with khaki weather cloths laced to it for protection. Sails were bent and everything was ready for a "spell of weather."

There were four of us in the crew besides Kima, the Jap. I mustn't forget the Jap, for he was a most important part of the little ship's company and he kept the coal range working overtime.

We laid a course for Matinicock buoy on the Long Island shore, and as the big 7-inch compass had not been adjusted we kept a close watch on it to get a check on any possible error on the different courses we sailed. We picked our first buoy dead ahead and, figuring our speed, found we were doing a good 7½ nautical miles an hour with the last of the flood tide against us. Just then Kima called us below for dinner, and, leaving one man at the wheel, we did justice to a fine Irish stew made by a Japanese.

At 8 P. M. we chose watches, W. P. Frost, the owner, and I taking one watch and John Rowland and H. L. Lewis the other. We chased the latter watch below, reluctantly, about 9 o'clock with Eaton's abeam and stood a pleasant first watch on deck, while the lights slipped by at an eight-knot clip and the last half of a moon lifted its crooked face over the Long Island sand cliffs.

The run down the Sound was uneventful. The wind petered out and the engine ran like clockwork, turning up 410 revolutions, which pushed Cero along a good eight knots, loaded as she was. When the watch on deck roused the sleepers out at 4 A. M. for the morning watch we were slipping through Plum Gut with a fair tide boiling under us. A light southerly came over Orient Point as I stuck a sleepy head out of the companionway, but I pulled myself together and pried my eyes open as we set a course for

Montauk. We fairly boiled down to the tall light on the easterly tip of Long Island and hiked the Mianus up to 419 revolutions per minute. It is nineteen nautical miles from Orient Point to Montauk, and we had the latter abeam, bearing W., just 1 hour and 58 minutes after passing Orient Light. Some traveling!

At 6:05 we were well outside and had Montauk bearing N. when we changed our course to W. by S. for the long run of 108 miles to Norton's Point, with no place to get in if we wanted to, and streamed the taffrail log. The sea was calm, but it was hazy and the sky was greasy-looking. Passed many fishermen outside of Montauk Point with seines around schools of mackerel, evidently making good hauls. After passing Amagansett these all disappeared and we didn't see another craft of any kind until we reached Rockaway Point.

Breakfast tasted good, and after it was disposed of at eight bells our watch sought the upholstery below to catch up in sleep. A light easterly was coming over the sea astern at that time. Two hours later I was waked out of a sound sleep by being rolled out of my bunk and found a long heave to the little ship, which I put down to a southerly swell. When I stuck my head out of the companion, however, I found it was blowing fresh easterly, with a following sea making up and the sun hidden in gray, leaden clouds. The watch on deck had set the mainsail, which was drawing like a house afire, and the log was spinning merrily to the tune of 8½ knots, though the rotator was being heaved forward by the following sea.

I didn't like the looks of the weather, but hoped that the breeze would moderate about noon, as summer easterlies often do. It didn't, however, and noon found us sliding over a heavy, following sea that was cresting badly. The wind seemed to have gone a point to the south'ard, making the sea a quartering one that slung our stern around as it hit, so we set the jib also, in the hopes that it would help to steady her. It would not draw, though, and as we had to keep her off to meet the heavier seas stern-to, both it and the mainsail, which was loose-footed, kept jibing over and threatening to pull their clews out.

The noon meal was eaten by watches, each man taking a bowl of beans between his knees, while the Jap had his pots tied down to the stove rail. About 1 o'clock I was below getting my oilers out when Cero broached-to and rolled down on her side as if she was going clear over. I sprang for the companionway, but the slide was pulled to, and as it opened on the lee side I couldn't push it back. The boat hung there on her side for what seemed an age, undecided whether to roll over or come back; then, feeling the rudder hard across her, decided on the latter course and righted. When I could get the slide back I beat it for the deck and found she had been caught badly by the second of three big combers and had broached-to until she was broadside to the sea, and the pressure on the sails had held her down. As the sails weren't drawing well, anyway, we stowed the canvas and also took the awning off the stanchions. Relieved of any after pressure she went better and steered much easier. But after that, when we saw she wouldn't roll over, no matter how far down she went, we didn't worry about her broaching-to. She rolled slowly and easily, and when she got her rail down seemed to hang there stubbornly.

The wind was increasing all the time and the sea getting higher and more wicked, the heavy cresting tops being blown off to leeward in spume. The wind being due east and our course W. by S., the tendency to keep the little boat dead before it, rather than quartering, was irresistible, and she would gradually keep working in towards the beach. She would work in until we were only from a mile to a mile and a

THEY CURLED UP BEHIND US ALL THE WAY FROM MONTAUK TO NORTON'S POINT. IT WAS HARD WORK TO KEEP FROM BROACHING TO WHEN ONE LIKE THIS CAUGHT CERO ON THE QUARTER

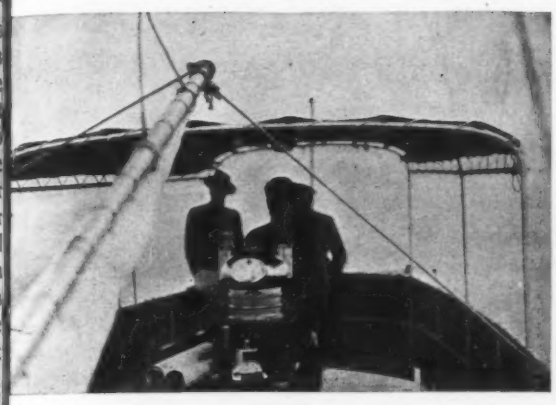
half off shore, and as this meant only from 7 to 9 fathoms of water, the seas would curl dangerously and warn us to work off into deep water. When we would catch a sea just right Cero would hang sometimes 30 seconds right on its crest and hydroplane forward at express speed. As the screw would lift clear the engine would start to race, but the governor would hold it down within bounds and keep it from tearing itself to pieces. Still, the excessive speed warmed the bearings a trifle and it seemed wise to cut down the revolutions to 350. Even so we were logging over 8¼ knots by both the patent log and by shore marks, and the "coffee mill" never gave us any uneasiness and fired as regularly as if she was back on Long Island Sound. The only question was, how long we could run before the sea and would we reach New York before it got too bad to keep on going?

Fire Island Light showed up in the gray to the north'ard at 2:20, and ten minutes later we discovered that the wire tiller ropes had slipped off the sheave and two of the strands had frayed through in the constant throwing of the wheel from hard-over to hard-over. Cero's rudder was of ample size, however, and hung outboard, and her builders had made a long 7-foot oak tiller for just such an emergency. We inserted this, disconnected the wheel gear, and with ropes rigged to the tiller and a man on each quarter handling them found that she steered much easier and that we could meet the seas and anticipate their thrust better.

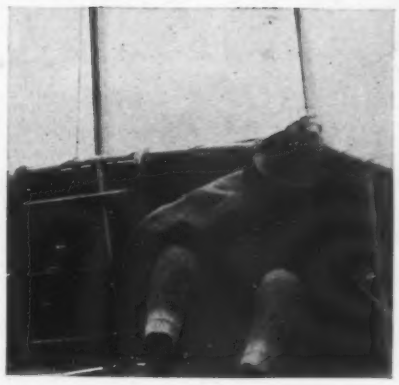
Between four and five o'clock we judged it was blowing between 40 and 45 miles an hour and it started to spit rain and thicken up, so that we could not tell just how far we were off shore. But about 5 o'clock I got a bow and beam bearing on Long Beach which placed us 2.1 miles off the beach and 12 miles from Rockaway Point buoy, where we would haul up for Norton's Point. We took a reading on the log, and keeping a due west course as well as we could when she was yawing from 3 to 4 points each side of west, we let her go. Our navigation was all right, for we picked up the gas buoy three miles off Rockaway Point dead ahead at 6:20 P. M., within five minutes of the time we expected to. The yellow bar here was a mass of breakers that would have smashed a ship to kindling had she gotten into them, but after we rounded the buoy and headed up N.W. the bar made a lee that gave us some protection, and we knew that our anxious hours were over, though it was piping up for fair now and was very cold.

At 6:41 we took in the log off Norton's Point buoy. It registered 107.4 miles from Montauk, while the distance by chart was 108 miles. Pretty good in that following sea, where the little packet was shooting off her course and threatening to broach-to time and time again! At 7 P. M. we dropped anchor off the Bensonhurst Yacht Club, tired but happy, and every man in the crew took his hat off to that Mianus engine and to the staunch little ship.

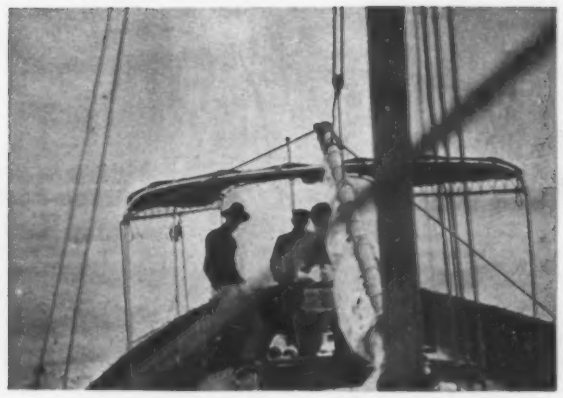
It had been a particularly trying trip with the very worst sea conditions that could have been had. Yet the ship had behaved splendidly and, after we found out what she would do, gave us no anxiety, while the engine ran like an eight-day clock. If it had failed us we would have been in a bad way, with no sea room to leeward and the Jersey beach only 40 to 50 miles away! When we shut the engine off it had run without stopping 27½ hours and would apparently have run indefinitely as long as we fed her gas and oil. She had not missed an explosion, had not heated, and had kept the storage battery charged so that we had electric lights at all times. That night the weather bureau reported a 58- to 60-mile gale blowing, and at Long Branch the wind attained an official velocity of 73 miles. We didn't have any illusions about wanting to be out in it.



THE BUSINESS END OF THE NAVIGATING DEPARTMENT WAS A REAL COMPASS



A SNUG CORNER OF THE AFTER DECK



EVERYTHING ABOUT DECKS WAS BUILT FOR STRENGTH

The arrangement of the Cero worked out ideally for off shore work. With the engine room entirely separated from the living quarters by a watertight bulkhead there was no odor of gas, oil or greasy bilge water in the cabin, and though everything was shut up tight the air below was always good. No water found its way below; everything was dry and there was no leakage, while the engine compartment was most convenient to the after deck and the engine-room slide did not have to be closed at any time. In fact, no one had to stand an engine watch, as the engine could be seen from the deck or through the heavy glass window of the cabin trunk, and one only had to go below when oil tanks needed filling or grease cups screwed down.

The plans of Cero appeared in the last issue of YACHTING, but the arrangement plan is reproduced again here to show how carefully thought-out the little boat was by her designers and builders, the Luders Marine Construction Company.

An analysis of the run gives the following data, which may be of interest:

Total distance New Rochelle to anchorage Gravesend Bay, 201 nautical miles. Time, 24 hours 10 minutes. Average speed, 8.31 knots per hour.

For those who are used to figuring in statute miles this equals 231 miles, averaging 9.57 miles an hour.

Engine revolutions: highest, 420; lowest, 350.

On the 108 nautical miles from Montauk to Norton's Point in the heavy following sea our time was 12 hours, 36 minutes, or 1 mile in just 7 minutes. This average works out to 8.57 nautical or 9.86 statute miles per hour.

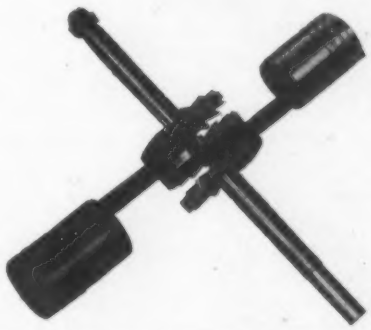
Modern Hydroplane Practice

THE evolution of the hydroplane type of speed boat in this country has resulted in two important changes. These are the building of smaller boats and the almost universal adoption of either one or two planes instead of a number of smaller planes. The big 40-foot hydroplanes have almost entirely disappeared, the majority of boats now ranging from 20 to 26 feet in length. The majority of these are of the single-step type. In the Gold Cup Race last year all but one of the boats were of this type. In a single-step boat it is the endeavor either to have the forward plane carry practically all of the weight, the after plane carrying very little of it and acting more as a tail or balance, or else to have the weight divided between the two planes, each carrying a proportion of it, the forward or amidship plane carrying the most. This matter of getting the proper balance is what makes for the success or failure of a hydroplane. There is no fixed rule for the placing of the steps. Some are placed forward of amidships and some aft of amidships. In the smaller boats in this country the general practice is to place the step about four-tenths of the length of the boat from the stern, and the boat should then be trimmed so that it balances practically on the step or just abaft it, with allowance, of course, for the angles of the planes and the power and speed of the boat.

The tendency also is to increase the power considerably in small boats. With the decrease in weight of engines per horsepower and the increase in the beam of the boats, much higher power can be carried in smaller boats than formerly. This summer will probably see 350 to 400 horsepower carried in 20-footers, whereas a few years ago the 40-footer Dixie IV only carried 550 horsepower.

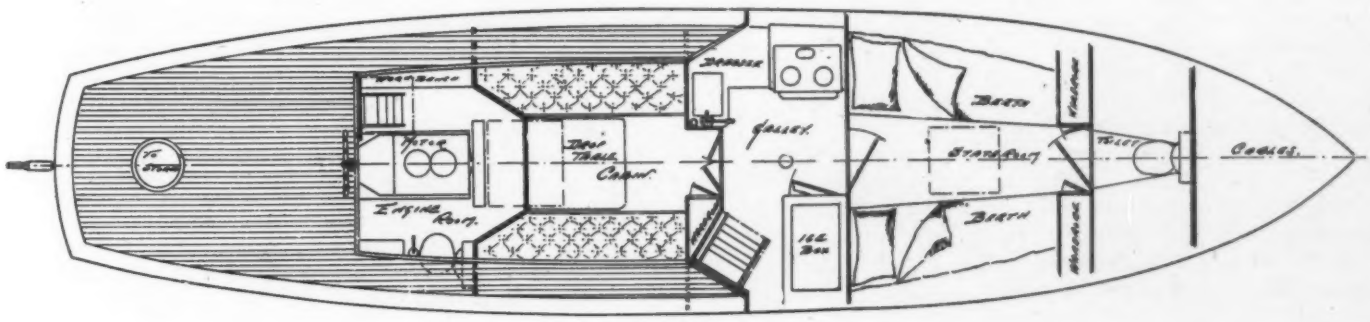
To Induce Engine Starting

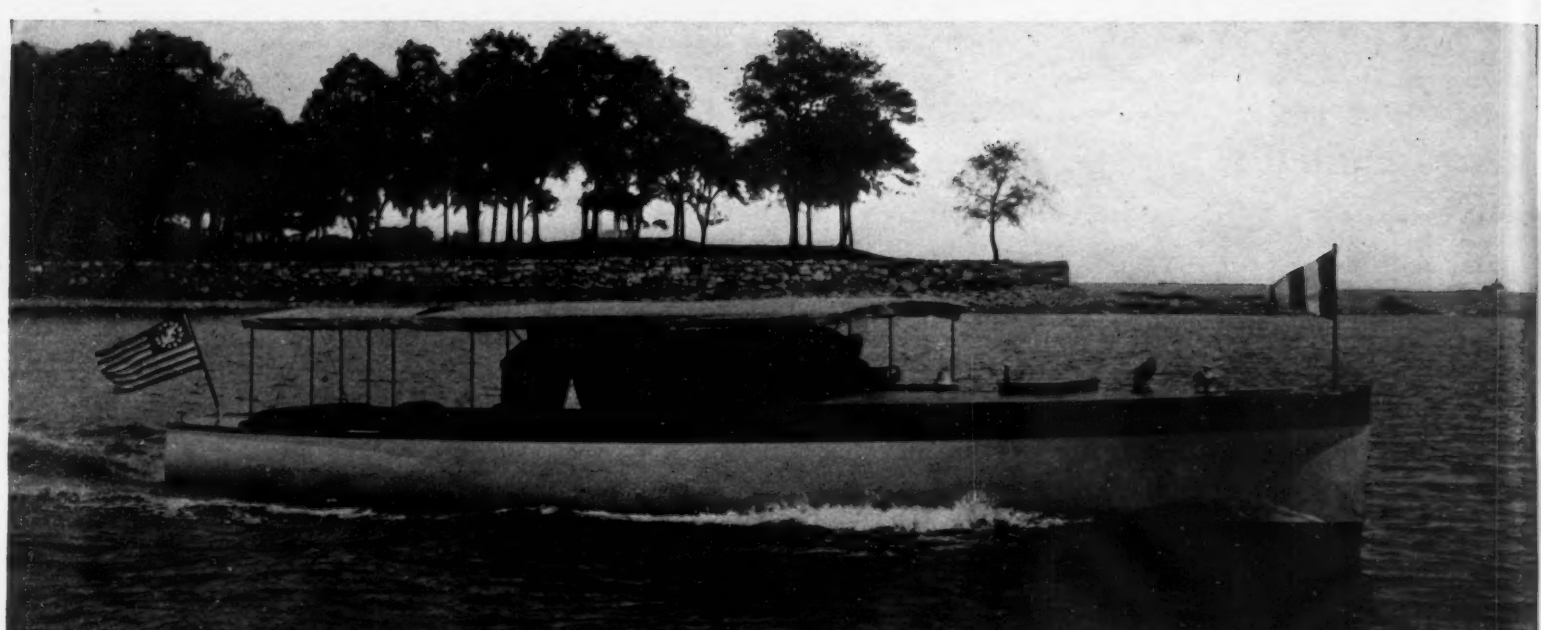
Most two-cylinder motors of the outboard type are designed so that the cylinders are opposed. A two-cylinder opposed motor is frequently hard to start without priming. One of the recent motors of this type on the market has sought to overcome this difficulty with the use of what they term a "charge agitator," located on the crank shaft in the crank case. This agitator consists of three discs cut something like a sprocket wheel with deep flanges,



CHARGE AGITATOR FOR 2-CYLINDER PORTABLE MOTOR

which assist in producing a perfect mixture so that the charge will fire easily, even when the engine is cold. It is claimed that this does away with the necessity for priming when starting.





MADGE, A 52-FOOT EXPRESS CRUISER. A LARGE COCKPIT AND A COMFORTABLE CABIN GIVE ALL THE ADVANTAGES OF THE MODERN TOURING CAR AND LIMOUSINE COMBINED, WITH A SPEED OF 18½ MILES PER HOUR

The Madge, a Novel Day Cruiser

THE new Speedway cruiser Madge, designed and built for Major W. H. Day, of Mamaroneck, N. Y., by the Gas Engine & Power Co., and Charles L. Seabury & Co., Consolidated, of New York City, is a fine example of the modern fast-express boat for general day use. This boat will be used on Long Island Sound and adjacent waters, and will hail from the Larchmont Yacht Club.

The design was especially worked out to meet the personal requirements of the owner for an afternoon boat for entertaining a party of eight to ten people with all possible comfort. A large cockpit and a comfortable cabin with conveniences give all the advantages of the modern touring car and limousine combined.

The builder's guarantee for speed was 17 miles per hour. In commission and with full equipment the boat made 18½ miles per hour with seven people on board. She is powered with one 6-cylinder, 60- to 80-horsepower Speedway medium-duty engine which runs at 600 to 800 revolutions per minute. The yacht is 52 feet long, 8 feet 3 inches beam and 3 feet draft of water.

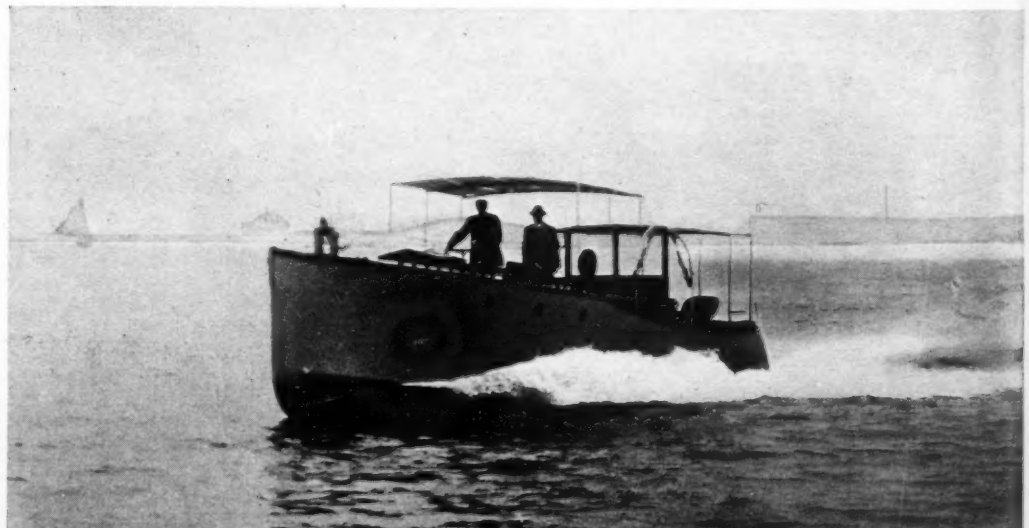
A somewhat novel feature in this boat is the absolute separation between the owner's party and the crew. When the doors of the cabin are closed the operator's cockpit is shut off, the only communication being by an electric call bell from the cabin and after cockpit. This gives the operator absolute control of his boat and the owner's party undisturbed privacy. The average day cruiser of about the same length is arranged with fore and aft cockpits and cabin amidships. This necessarily divides the party, a rather objectionable arrangement which is avoided in the Madge by the large unobstructed cockpit aft. The sometimes unsightly proportions of a glass cabin with full head room in this type of boat has been avoided by using a decided crown in the roof, which gives 6 feet 3 inches head room.

Passage from engine room to the operator's cockpit is made by a door on the starboard side. The controls in this cockpit are located on the port side with automobile steering wheel, engine controls, reverse lever, switches, gauges, etc. A permanent seat with storage locker under is located on the starboard side. Entrance to the cabin is had by doors amidships.

Raccoon, A 25-Mile 50-foot V-Bottom Day Cruiser

ONE of the recent additions to the express cruiser class, just now so popular, is the Raccoon, a 50-foot V-bottom day cruiser recently finished at Lawley's yards for Mr. Chester W. Bliss, of Boston, Mass., from plans by Wm. H. Hand, Jr., of New Bedford, Mass. The plans were published in the March, 1915, issue of YACHTING and the photograph herewith shows the boat on her trials, on which she showed a speed in excess of 24½ statute miles per hour. Her power plant consists of two 6-cylinder, 100-horsepower motors which drive twin screws that turn up approximately 1,200 r.p.m.

She is built in Lawley's best manner and is most attractively finished below. Under the forward raised deck is the main saloon with two fixed berths and two Pullman berths, while there is also a large toilet room and galley. Under the cabin trunk amidships is the engine room and the crew's quarters. This compartment is especially well arranged and is thoroughly lighted and ventilated. Engine controls lead to the bridge deck amidships, while there is a very comfortable cockpit aft, protected by a glass windshield. The dimensions of the yacht are: Length overall, 50 feet; beam, 10 feet; draft, 3 feet.



RACCOON, THE NEW 25-MILE DAY CRUISER FOR CHESTER W. BLISS, ON HER TRIALS

A Cruise to the Menai Straits

Being the Account of an Interesting Cruise Along the Welsh and Scotch Coasts in Search of Cups and Fun

BY H. M. W., in *Yachting Monthly*

THOUGH this cruise cannot be said to have been exactly a "joy sail," including as it did two potential shipwrecks in twenty-four hours, not to speak of calms and fogs, yet such things are pleasant in the retrospect—many unpleasant things are—nd sometimes worth recording. We saw, fact, something more of Menai Straits etween Anglesea and the Welsh coast oper) than we either designed or desired. The ship's company consisted of the ipper, his two sons, and W. Stubbs and Chatterton—no paid hand. I had made rtain alterations since last season in my cing cutter Española, reducing weight of ar and ballast, and cutting two feet off ast and mainsail, the good result in seaorthiness being very marked. Moreover, r prize list to date was a most satisfactory e, and we proposed adding to it during e "Straits week."

Sunday, 3d August, 1913

Dropped our mooring in Kingstown Har-r, Ireland, at 5:30 A. M. in a mere eath from N., and took thirty minutes to ach the pier end. Almost immediately, owever, a quite respectable air came along, hich quickly ripened into a fresh breeze, e first wind to speak of for a week. I rned in to complete my slumbers, which ere, however, disturbed by the clatter of jibe off Scotsman Bay, a cushion having one overboard, which the boys recovered the first shot. Passed the Kish Lightship ose to at 7:30 A. M. in a fine, steady eeze, second jackyarder set. The passage Holyhead, Wales, although a tiresome n by steamer, I always think one of the easantest—just enough navigation to be teresting, especially on the outward trip, here the Stack race has to be allowed for. t noon the breeze was so strong that I st round on the starboard tack and lowed topsail. We had just previously ghted the Welsh coast, picking up the high ountains first, not the familiar dome of e Holyhead Mountain, as is usual. We ssed the breakwater at 2:30, Irish time—½ hours' passage for the 64 miles—and ached up to the bight called on chart the New" harbor, to get the weather shelter. he cutter Concha, a Dublin Bay 25-footer, hich had arranged to sail in company with , came in at 8:30 P. M. under jackyarder, d reported a heavy passage, all hands hree) having got wet jackets, which was ot surprising. We took the worst case, Campbell, on board Española, and, having thoroughly dried his outer and moistened his interior clay, bunked him in the saloon for the night.

Monday, 4th August

Got under way at 7 A. M., wind N. E., light. Before clearing the breakwater decided to take down a reef, as it suddenly freshened into a strong breeze. Concha had also reefed, and led the way, as her owner knew the passage inside the Skerries. It was the top of the springs, with three hours' flood to go, and from a mile away we saw the breaking seas in the passage, so were not surprised when Concha presently came about and ramped away for Holyhead, hailing as she passed that she would get a pilot there, and make for Caernarvon Entrance. I did not at all like the appearance of the Sound myself, and decided to try the outside passage. We had to square right away, as the tide was taking us bodily towards the race. It foamed like a river past the island, which we rounded with some difficulty, pounding at once right into the worst of the race. Had we held on to the N. W. for half an hour, we should have escaped it, and no doubt as it was we should have got through without damage, but the tide was nearly spent. The prospect of a thirty miles' beat, for the most part against a spring ebb, along an unknown coast and with an ugly haze to windward—also the narrow Puffin Island entrance to finish up with, probably in the dark, made me hesitate. When the dinghy began to walk along the deck as the result of two or three frightful combers that nothing could rise to, and which well nigh swallowed the whole forward end of the ship, I decided we had had enough, and came round in the first "smooth," fortunately without shipping anything to speak of. We should certainly have had to cut the dinghy adrift had we been towing her, and I was quite prepared to have the cockpit filled by the dangerous, breaking seas. However, nothing happened. The flood tide was running as strongly as ever, and we got back around the island by inches at a time, though doing over six knots.

It was now necessary to make an attempt on the Caernarvon entrance, as my pilot, engaged for the week's racing, was to meet me that evening in Beaumaris. This involved not only the intricate navigation, unpiloted, of Caernarvon Bar and afterwards of the Straits, but also that of the dreaded "Swellies" between the bridges. I decided, however, to attempt it, having studied the large scale charts of both. We made short miles of the reach back to the S. Stack, and it was a stroke of luck that we should meet Concha just coming out of Holyhead again with her pilot on board.

There was a tumbling sea off the Stack, but nothing to what we had come through. Made our number here as we passed close in, and the usual white and red flag answered us. Sailed a compass course for the channel buoy, which cut across many beautiful bays and fine headlands—the wind, if anything, still heartier, and though off shore, plentifully crisping the calm sea with white water. We passed and left Concha a mile astern, and also a yawl of about 15 tons. Off Caernarvon Bar a large bark was at anchor, a circumstance of some importance to us, as will appear presently. Nearing the Bar Buoy, twenty-four miles from the Skerries, I hove to in order to speak Concha, and suggested anchoring until the flood tide made. However, she replied that she was going in against the ebb, then three hours gone, which occurred to me as a decidedly risky decision, as it was

CHART OF THE IRISH SEA, MENAI STRAITS AND THE FIRTH OF CLYDE

a dead beat. But I agreed, and we proceeded. I found we were in the post of honor as I cut inside the Bar Buoy and went about on the starboard for No. 1 black buoy, the channel very crooked here, but splendidly buoyed, and smooth water. We beat up as far as No. 3 buoy and past the Perch, still leading Concha, which sailed dead in our wake, but neither was making much way. Through the Belan narrows, just ahead, the tide runs 5 knots, which, except with a fair wind, would be impossible to stem. At this moment I saw a vessel at anchor in a bay on the port hand, and the chart gave thirteen feet of water over the whole of this bay. I decided to run into this slack water and wait for the flood.

So far our navigation had been irreproachable, and, if the chart had been up-to-date, it would have continued to merit the description. But disaster waited for us—perhaps I should have reflected that charts are meant to warn, not to encourage, and that, when you have sand to deal with, your affair is with the unknown. Perhaps, too, we should have gone clear had we made another board, and so headed deeper in the bay before leaving the buoyed channel. Stubbs was on the lead, and he could have done no more. He gave us three fathoms for several successive casts, which seemed to agree with the chart, then suddenly 1½—I don't think he could have been quicker. I am certain the helm went down on the very word, and for one awful fraction of a second we moved, then quietly stuck. All hands jumped forward at once, and she went off, or, rather, farther on, and dragged over the sand with dangerous rapidity towards the Perch, which, of course, was over rocks. We threw over the kedge, which did not hold, and then the other anchor and chain as soon as possible, and pulled the mainsail off her, breaking a batten in doing so.

It was by now 4:30 P. M., about two hours of ebb to go. There was some talk of legging her up, but it is easy to talk of these things; it is a dangerous game at best. We could not tell how far the leg would sink, nor exactly what would happen if it broke, besides I did not think the water could fall much more than a couple of feet, and we should still be water-borne. We lit our pipes, and had a momentary gleam of something very like hope when we saw Concha apparently up on the far side of the channel. She came round, however, and disappeared past the bend, where the wind freed her sufficiently to enable her to get through the narrows. She really did go up hard and fast off Caernarvon, and stayed there a couple of hours, as we subsequently heard. The comical side to *her* mishap had reference to the adventures of Campbell, who was again very wet (externally). He was due back in Dublin the following day, and, naturally, in the circumstances pessimistic as to the rapidity or certainty of the continued voyage of the Concha to Bangor, where he hoped to connect with his train. Accordingly, he took the opportunity of getting out of her, as she lay aground, in a shore boat. Landing at the Yacht Club he met a member who offered refreshment and a railway time-table. From the latter he ascertained that if he sprinted straight to the station, omitting the club, he had a sporting chance of catching the only train connecting with his steamer. In effect, he just succeeded in plumping, ticketless and unrefreshed, into a carriage already in motion, and he must have been well out in the Irish Channel by the time we were afloat again.

Meanwhile the tide was falling—there seemed to be no bottom to it—from 7 feet of water the level sank in two hours to 1½ feet. Afternoon tea—a weirdly distorted meal, and our only one since 6 A. M., was accomplished somehow. As we lay on our port bilge some water ran up her side, and poor Chatterton's suit case, hitherto the admiration of the rest of the crew, was fished out in a lamentable condition. For my part two problems occupied my attention: (1) Would the inside ballast—one ton—shift? (2) Would the vessel rise when the flood made? The danger, of course, was lest we should have sunk far into the sand.

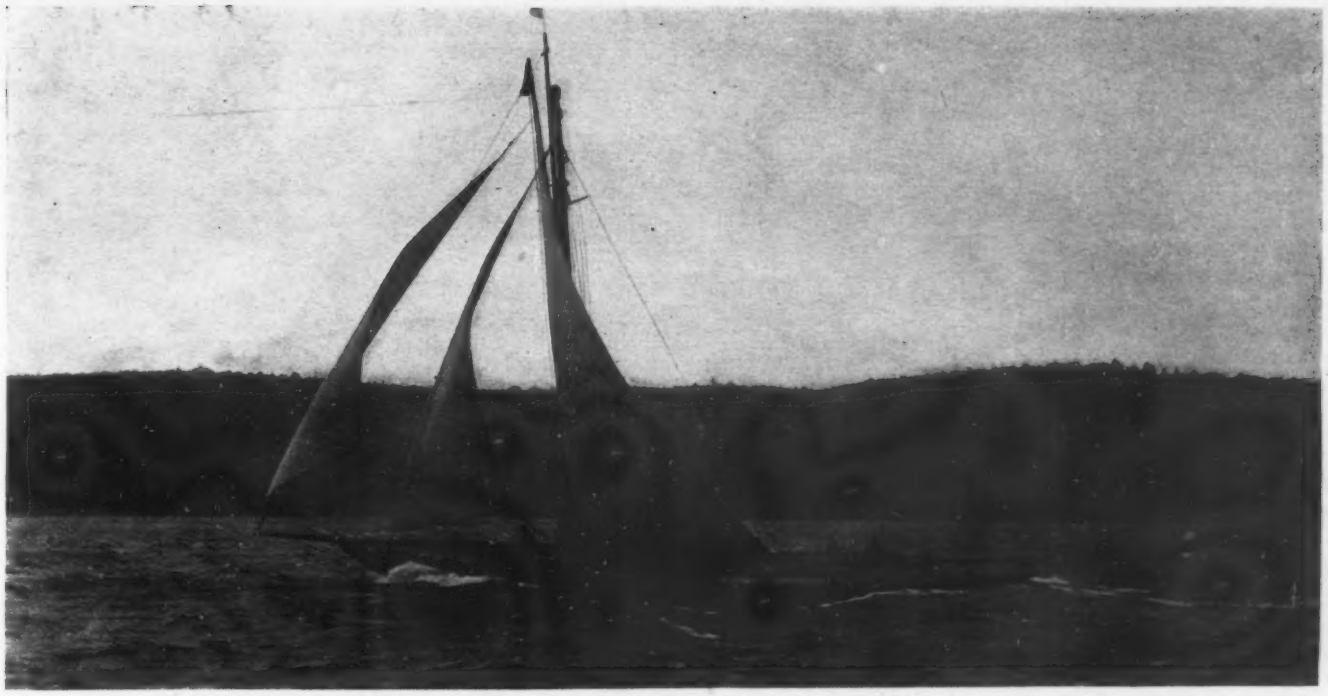
About 6:40 the tide turned, and, rising with extraordinary rapidity, moved the vessel, to my great relief, with no more than three planks under. We sent out the dinghy to under-run and weigh both anchors, as there would otherwise have been great difficulty in getting them aboard when we floated in the strong current. A fishing boat with two men appeared as we were getting the sail on her, and I gave them a passage to Caernarvon, towing their boa I wanted them to send a wire for me t Bangor to my pilot to meet me next da at Port Dinorwic, as it was too late in th evening to go through the Swellies. W floated about 7:45 P. M., dragging up gre quantities of sand, which swirled around u and were off Caernarvon shortly after P. M., where our fishermen cast off, afte giving some instructions about a red buo which were unfortunately misunderstood.

It should be remembered that all th time a very fresh breeze was blowing, an we were making a series of dashes from on side of the channel to the other with 4½-knot current under us. The buoy re ferred to marks the meeting of the Bango and Caernarvon channels, and consequentl the change in buoyage, and must be left t port when bounded for Bangor. I the hurry we carefully left it to star board, as we had done with all pre ceding red buoys, and held confi dently on for perhaps 40 yards. I wa below when she struck—this time wit considerable force, and the situatio immediately became serious. Bein on the starboard tack, the tide rush ing up on the lee side, forced the ves sel up and over to windward, rushin furiously around like a cataract, an forming a great eddy, which mounte the weather rail. Dropped main an foresail and tried to wear her, bu she obstinately forged further on.

Fortunately our fishermen had ob served the disaster from Caernarvo and, setting their sail, cleverly man aged to come alongside in the eddy We could, of course, have kedged and so come off, but with great ris of losing the anchor. The fisherman' advice was directed towards drivin her over the spit and back into th channel by a swatchway, but even tually, after about ten terrible minutes she sailed herself off in her own way to our immense relief. It was now abou 8:30 P. M., and I had had enough naviga tion for one day, so took on one of th fishermen as pilot to Port Dinorwic. He charged only five shillings altogether for hi services. Let got at Port Dinorwic, where a certificated pilot came off and said h would take us through the Swellies for eigh shillings. It was, however, getting dark, w were all very tired and hungry, and I pre ferred to get our own pilot, Bob Price, t come for us next morning.

Stubbs and I therefore proceeded ashor to telephone or wire to Bangor, leaving th others to prepare a very special dinne against our return. We found there was n telephone, and the telegraph office wa closed, also no train ran to Bangor unt 9:45. There was no scheduled train to brin us back, and our race at Beaumaris ne day was timed to start at 11 A. M. Th situation seemed hopeless until the station master discovered a midnight special ex cursion back from Bangor. Just time t

IN ROUGH WATER, WITH A SINGLE REEF DOWN



CUTTER MIGNON OFF AN ANGLESEA HEADLAND

bolt back to the yacht and tell them to keep an anchor watch for us, then to the station again, dinnerless, and a further wait of an hour for the overdue 9:45 train, finally reaching Bangor at 11 P. M. Tried ineffectually at the Station Hotel to telephone Beaumaris or Garth, and then we set forth on what looked very like a wild goose chase for Garth and Bob Price.

The lights were out when we fetched up at the Ferry House and interviewed the Pier Master, an old sea captain, who had been thoroughly enjoying his Bank Holiday, and was preparing for bed. Yes, he knew Bob Price—had, in fact, seen him at Beaumaris awaiting us; he would (though partially attired) take us to his house, and, further, he was steaming out to Caernarvon Bar in the morning to pilot a bark (the one we had seen), and he would take Bob Price and drop him into the Española at 6 A. M. He was a sportsman, he said (several times), and added, as he took my arm and steered a fairly straight course up the middle of the narrow street, we were *all* sportsmen, and must stop the night in his house, and steam down in the tug with him next morning.

At twenty minutes to twelve we ran Bob Price to earth (also retired for the night). To him I explained as much of the complicated situation as was possible in three minutes. He supported the captain's hospitable offer, and they both said we could not possibly catch the midnight train. To myself, however, a mile and a half in fifteen minutes seemed among the lesser difficulties of this eventful day, and we left the captain to find his way home, unsupported, and evidently astonished at such tempestuous activity.

On the stroke of midnight we burst into the station, and, taking the refreshment room in our stride, swallowed two steaming cups of Bovril, which Stubbs has constantly affirmed saved our lives. It was 2 A. M. when the express steamed out of the station, and three when we finally reached Port Dinorwic, where we had to climb a wall to escape from the locked-up station. It seemed the first bit of real luck when our hail to Española was answered, and our troubles finally terminated by dinner at 3:30 A. M.

Tuesday, 5th August

Roused at 6 A. M. by a steam whistle, I looked out and saw the captain's jolly face surmounting the bulwark of his tug. His mouth was open, but no speech issued from it, and his finger pointed down his throat. Clearly no time was to be lost, and the remedy was produced with all expedition, the captain being just able to articulate "no water" before taking his dose, which he described with recovered fluency as "just milk." Bob had some "milk," too, and got aboard, and we all turned in again, the tug proceeding down to the bar. The captain was getting £16 for towage and pilotage of the bark, which seemed adequate. Let me say here that Bob Price, our pilot, had only one vice, and that not an alcoholic one. He never drank, as far as I could discover, anything after 6 A. M., but he consumed a prodigious quantity of tobacco—2½ ounces per day he told me. He ate most of it.

At 8 A. M. we got underway for the passage of the Swellies. Bob Price said the regular pilots would not go through until three-quarter tide. We had only quarter-tide, and the spectacle with a heavy spring can only be described as shocking. There was no wind between the bridges, and the two best oarsmen of the crew got ahead in the dinghy under Bob's direction to keep steerage way on the yacht. Once I held my breath as we slid desperately along a moving slope fringed with an eddy which broke into overfalls quite capable of swamping the dinghy. They say a boat will go through in safety in a flat calm without canvas. The chief danger to sailing vessels is being taken aback by a flaw or by the wind created by the speed of the ship.

It is possible that familiarity with this and the many other horrors of the Menai Straits would in time enable an ordinary (well insured) owner to drift through in this manner without losing his boat or his reason, but if I ever again have occasion to perform this trip, I will wait for slack water and, if possible, avoid spring tides.

Just past the suspension bridge we took the ground again. It was not the pilot's fault; a flaw took her head on to it, and we hung for some ten minutes, the pilot maintaining that she would work over the spit, while the (inevitable) fisherman, who came off in his punt, held the contrary view. I settled the matter by sending off our dinghy with the kedge, when we came off at once. I gave the fisherman a shilling, but he appeared displeased. As we passed Concha, riding to anchor opposite her owner's house (where, by the way, she had again got aground), she hailed to tell us of her sensational passage of the Swellies the previous evening in the dusk. She had gone right over the flat portion of the rock, which they had actually seen under them.

I do not know whether I talked in my sleep during this cruise, but more than once my first mate woke me by blood-curdling references to this and similar episodes. We got down, after all, to Beaumaris in good time for the race, in which we did well at first, but dished our chance by over-reaching in the attempt to get in out of the tide. After the finish, at which we only beat Concha by two minutes, we went back to Garth, on the advice of Bob Price, to pick up a mooring to which we could safely lie—an astute move on our pilot's part, who resided, it may be remembered, at Garth. The situation lacked any other advantage,

and removed us inconveniently far from the gaieties of Beaumaris. We hauled the buoy on board with some difficulty, as it was as big as a quarter cask, and, encouraged by Bob Price, who invited us to admire its size and reliability, all hands tailed on to the rope, which presently burst. The chain fell to the bottom, and the crew sat down suddenly, not without profanity, in various uncomfortable positions about the deck. After that we got another buoy, and Bob Price took the ancient quarter cask and its mouldy cable away with him.

As some of the crew had not been ashore since we left Kingstown, we all spent the evening in fashionable society at Beaumaris, Chatterton, whose wardrobe was out of action, borrowing a waistcoat off Stubs for the purpose. This garment, while effecting some improvement, very inadequately diverted attention from his lower canvas, which advertised a condition akin to destitution—so much so that he found it desirable to come head to wind when encountering his friends.

WEDNESDAY, 6TH AUGUST

Joined to-day by Beames, whom I had asked for the week's racing—our complement, all told, being now seven. There is not much variety in Straits sailing except in the degrees of proximity of the bottom, which is not amusing. Our course to-day was a spinnaker run from Beaumaris to Caernarvon over the last of the flood. Wind N.N.E., very light; about eighteen vessels of all sizes started, including Alana and Punctilio, 25-footers arrived from Dublin, and all finished within ten minutes of one another, the tide doing most of the work. The ebb had made, and many had to kedge off Caernarvon in unsuitable berths, being unable to stem it. We were towed back by the tug into the berth we wished to occupy. Alana lost her bowsprit that night through a motor launch drifting foul of her. The circumstance that during the preceding 36 hours we had not got aground even once was considered noteworthy.

THURSDAY, 7TH AUGUST

Bathed in morning, but regretted it, as the water was foul with many weird impurities which float up and down each tide everywhere in the Straits. While lying in this berth, where the tide did not exceed perhaps 3 knots, I made the curious discovery that the strain on the cable was nothing like what would have resulted from being towed at this rate through still water. The vessel generally lay with the chain at an angle to the current of thirty degrees or more, and so slack that I could gather it in with one hand. Perhaps there is a planing movement, or, in shoal water, some sort of undertow which may explain this.

There was a light N.W. breeze all day, and, admirably piloted, we beat Capella, which was allowing us nine minutes, finishing ten minutes ahead of her, and took our solitary prize (third). The southern mark boat was not to be found, the boatman having been taken suddenly ill, and, recovering, had pulled up his anchor and drifted up a channel. The cruisers rounded by agreement No. 4 buoy instead, near the spot where we had first grounded on our way in.

FRIDAY, 8TH AUGUST

Towed by the tug to the line. Had a good race with Capella over the same course, and were beaten by 1½ minutes by her. After this race we decided to clear out as soon as possible for Scotland.

SATURDAY, 9TH AUGUST

Drifted down through the Swellies at slack water, seeing Eileen and Tigris start at Port Dinorwic as we passed. At Garth anchorage said good-bye to Beames, who was genuinely regretted by all hands. He had worked like a hero. Chatterton also bid us farewell, being due back in Dublin, and I paid off Bob Price, who had proved himself a most efficient pilot and sailorman. He had consumed nearly a pound of tobacco in the five days, and used up all the matches in the ship. Our company was thus reduced to four.

SUNDAY, 10TH AUGUST

Any craft bound out by Beaumaris should certainly await the tide off that town, and not at Garth, where the south-going stream persists long after high water. The point at which the tides divide is, in any case, a variable one. We let go at 6 A.M. in a flat calm, hoping for the ebb, but found we were actually carried, if anything, towards the bridges. It was 10 A.M. when we approached the entrance at Puffin Island, where we found a considerable swell, and the ebb nearly done. There is no slack water, and, in the narrow passage and the swell—there being no wind at all and the tide on the turn—we were in some danger of going on the lighthouse to port or the perch to starboard. The dinghy, being lashed on deck, would have taken some minutes to launch, so we had recourse to the paddle, which just brought us outside in time to meet the young flood. It became then a question whether this would presently set us back up the Beaumaris Channel, towards Conway, or on Puffin Island and all the foul ground near it.

In this perplexity a small auxiliary yacht came to our assistance with an offer to tow us in again, and so we got back and let go in three fathoms. We were apparently fated to remain yet another day in the abominable place. About noon, however, a steady little breeze came away from N.W., and I left it to the crew whether we should start and face the certainty of a night out. The vote in favor of getting away at all costs was unanimous, and so we sailed at 12:15 under jib-header and jib-topsail, slowly, because of the flood tide, but assured at last of having escaped from waters to which I hope never again to return. How good it felt to see again the level horizon ahead and broad miles of honest sea water to either hand, and to know that ample fathoms of it separated our keel from a clean sea floor, instead of the mud we had so often ignobly rooted in as we crawled about yonder miserable ditch!

The air quickly freshened into a fine sailing breeze, so that, steering N. nearly close-hauled, we made, in four hours, twenty-two miles on the log. At 4 P.M. the Isle of Man came in sight, the Welsh mountains being still visible. We had been set, by reckoning, about five miles to the E. of the compass course, and although we spoke of making for Douglas, I thought it better, as the wind backed slightly and permitted of our lying more to the westward, to haul up for the Chickens. At 8:15 the log gave us forty-eight miles, the Calf then bearing N. by W. The horizon to the southward had for some time showed heavy banks of cloud or fog. As the night drew in I hauled up further to the N.W. to get a good offing. Found the log choked with weed when we took a reading at 9 P.M. Wind backing to W.S.W. and falling light. Chickens light abeam at 10 P.M.; when I turned in, to all appearance a fine, clear night and a fair wind, what there was of it.

Turning in I have frequently noticed is the signal for things to begin happening. I was called within an hour by the watch, who said the Chickens light had just disappeared. There was no headland to shut in, and it was apparent that an advancing fog, which has not as yet reached us, had swept up from the south. In five minutes we were enveloped in it, and the wind at the same time died away, and was succeeded by capricious puffs from various quarters, chiefly ahead. No more sleep for me that night. The watch turned in and slept with the others till after 6 A.M., during which time I never left the helm, except to put the ship about once or twice. Among the reflections which occurred to me in the course of this lonely and anxious vigil I recall in particular the observed effect of unpleasant external conditions in promoting healthy and prolonged slumber on the part of the watch below.

Fog continued very dense until 1 A.M., when for a few minutes it cleared, and I got the reflected light of St. John's (twin flash, 7½ seconds). Had only just time to identify it when the fog closed down again thicker than ever, the wind now drawing into the N. At 6:30 was unable to see twenty yards ahead. A steamer hooted once or twice to starboard, but far away, and I judged we must be closing with the Irish coast. It is not a good coast to have aboard in a fog, and I was puzzled at hearing no sound signal, as the S. Rock gun should have been heard, unless my dead reckoning was altogether astray.

I then did what was perhaps not altogether a judicious thing, but I felt sure we would get the S. Rock gun. I made a long tack inshore on the starboard. At 8:30 I saw the faint outline of land, and called up the hands. It was intensely exciting for

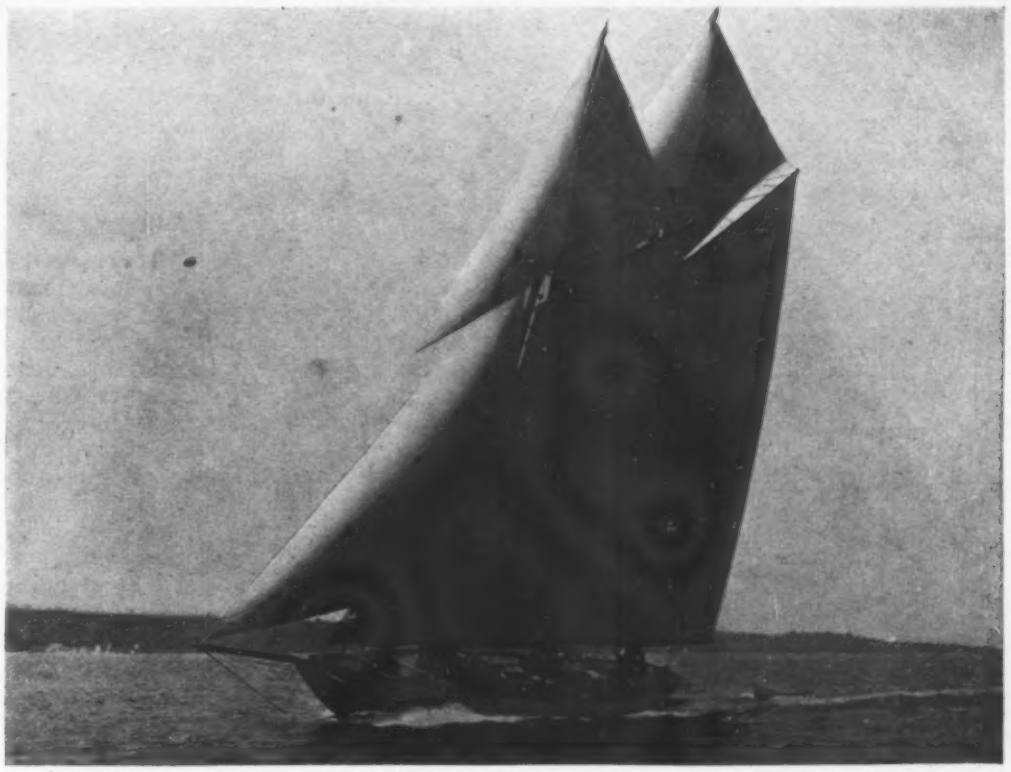
(*Continued on page* 38)

Schooners Vagrant and Katoura Run to Bermuda

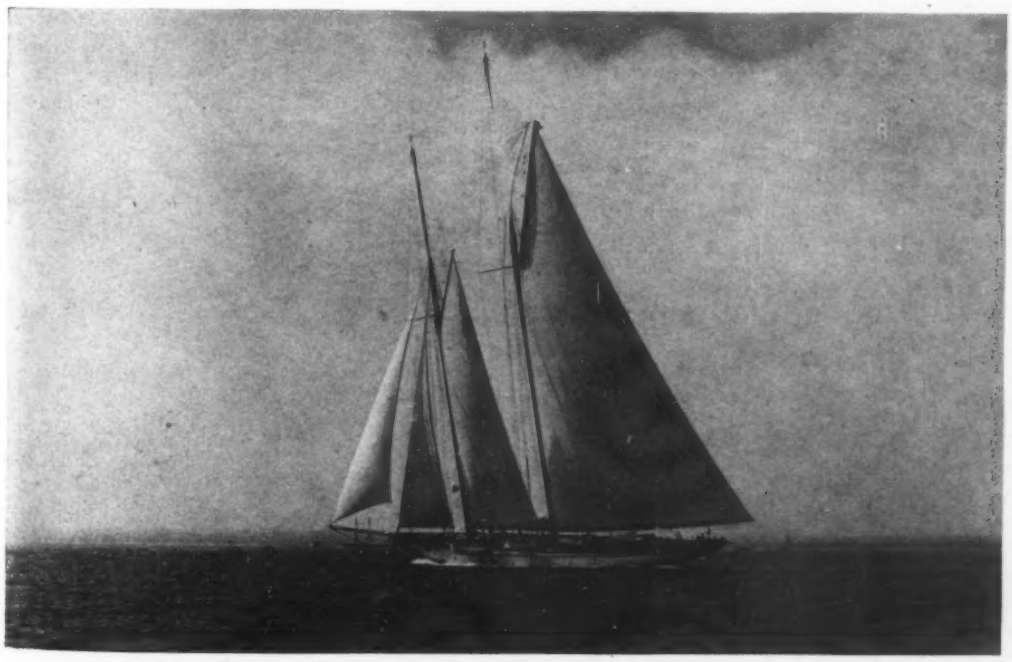
SOME time during the winter a race to Bermuda between the two most recent Herreshoff schooners, the Katoura, built last year for Commodore Robert E. Tod, and the Vagrant, built in 1913 for Commodore Harold S. Vanderbilt, had been planned as a test of speed, both boats being built especially for ocean racing. Owing to the death of Commodore Vanderbilt's cousin, Alfred G. Vanderbilt, however, the race was abandoned, but as plans had been made for taking the trip the owners of the two yachts decided to make the run in company to Bermuda, though the event was in no ways a race, Vagrant using her auxiliary power on parts of both the outward and homeward passage.

Inasmuch as this was the first real tryout of the two yachts in approximately the same condition a comparison of the day's runs of the two vessels is particularly interesting. The yachts left New York on May 12 and encountered generally southwest to southerly winds on the outward passage, Vagrant arriving off Kitchen Shoal Buoy, Bermuda, in three days, eighteen hours and twenty-three minutes, while Katoura took three days, nineteen hours and fifty minutes for the passage, the latter boat sailing a five-mile longer course than the former.

Better time was made on the run back, although as Katoura came to New York and took her time to Ambrose Channel Lightvessel, while Vagrant went to New London and made Montauk Point, a real comparison cannot be had. On the return passage Katoura was three days, no hours and thirty-four minutes doing the 660 miles to Ambrose Channel Lightship, while Vagrant was three days, four hours and fifty-five minutes doing the 630 miles to Montauk Point. The best day's run on the outward passage was 199 miles, made by Vagrant from noon to noon May 14 to May 15 in a light southwesterly wind and smooth sea. On the return trip the best day's run was made by Katoura, 253 miles, to noon May 22, while Vagrant made 217 miles to same day, although as she was some two degrees further to the eastward conditions may not have been the same. The winds on this day were light easterly to strong southwest, according to the weather observations kept by Commodore Vanderbilt on the Vagrant.



SCHOONER VAGRANT, COMMODORE H. S. VANDERBILT, WHICH MADE A RUN TO BERMUDA AND BACK IN MAY



COMMODORE R. E. TOD'S SCHOONER KATOURA MADE A FAST RUN HOME FROM BERMUDA IN 3 DAYS, 34 MINUTES

The following comparison of the logs of the two boats was compiled by Commodore Vanderbilt and is particularly interesting, as it shows the positions of the two yachts at noon of each day and the distance run for each twenty-four hours:

Katoura took departure Ambrose Channel Light Vessel, bearing N. E., distant 4 miles, 3:45 P. M., May 12, 1915.
Vagrant took departure Scotland Light Vessel, bearing S. W., distant 2 miles, 3:27 P. M., May 12, 1915.

Noon		Latitude	Longitude	Distance, Miles
May 13th	Katoura	39° 05′ N.	71° 40′ W.	131
	Vagrant	39° 05′ N. by D.R.	72° 12′ W.	114
May 14th	Katoura	37° 11′ N.	69° 07′ W.	162
	Vagrant	37° 10′ N.	69° 22′ W.	176
May 15th	Katoura	35° 18′ N.	65° 51′ W.	192
	Vagrant	34° 42′ N.	66° 40′ W.	199
May 16th	Kitchen Shoal buoy (Bermuda) abeam:	Katoura	12:15 P.M.	184
		Vagrant	10:30 A.M.	175*
			Distance Katoura	669
			Distance Vagrant	664

Time of passage: Katoura 3 days, 19 hours, 50 minutes.
Vagrant 3 days, 18 hours, 23 minutes.

*Vagrant's engine netted about 40 miles on this day's run, and during the trip.

THE RETURN RUN

Katoura took departure Kitchen Shoal buoy (Bermuda) 7:25 P.M., May 19, 1915.
Vagrant took departure Kitchen Shoal Buoy (Bermuda) 7:05 P.M., May 19, 1915.

Noon		Latitude	Longitude	Distance, Miles
May 20th	Katoura	33° 45′ N.	66° 18′ W.	117
	Vagrant	34° 04′ N.	65° 51′ W.	117
May 21st	Katoura	36° 07′ N.	69° 25′ W.	208
	Vagrant	36° 12′ N.	68° 12′ W.	172
May 22nd	Katoura	39° 27′ N.	72° 37′ W.	253
	Vagrant	39° 10′ N.	70° 49′ W.	217
	To Ambrose Channel Light Vessel			82
	To Montauk Point			124
			Distance Katoura	660
			Distance Vagrant	630

Katoura passed Ambrose Channel Light Vessel 7:19 P.M., New York time.
Vagrant off Montauk Point 11:20 P.M., New York time.
Time of passage: Katoura 3 days, 00 hours, 34 minutes.
Vagrant 3 days, 4 hours, 55 minutes.

Note.—Vagrant's engine netted about 4 miles during the return trip.

WEATHER CONDITIONS

NEW YORK TO BERMUDA

May 13th, Thursday—Fresh to light S.S.W. breeze. Heavy southerly squalls, rain and rough sea, followed by fog, calm, southerly swell and light W.S.W. airs.
May 14th, Friday—Light W.S.W. to N.N.E. breezes; 6 hours fog to clear. Southerly swell and confused sea.
May 15th, Saturday—Light southerly wind; smooth sea; clear and fine.

RETURN FROM BERMUDA

May 20th, Thursday—Light S.W. breezes; calm, and fresh to moderate N.E. breeze; moderate sea.
May 21st, Friday—Light N.E. breeze and calms; clear and fine. Smooth sea.
May 22nd, Saturday—Light east to strong S.W. wind; smooth to rough to moderate sea; clear and fine.

The Vagrant is 80 feet long on the water, 109 feet overall, 24 feet 10 inches beam and 14 feet draft, and is fitted with a 6-cylinder, 5½ x 6-inch Sterling engine with a detachable propeller. The Katoura is 115 feet on the water, 162 feet overall, 30 feet beam, 18 feet draft, and is fitted with a 4-cylinder 5½ x 6¾-inch Sterling engine as auxiliary power.

Difficulties in Starting the Engines

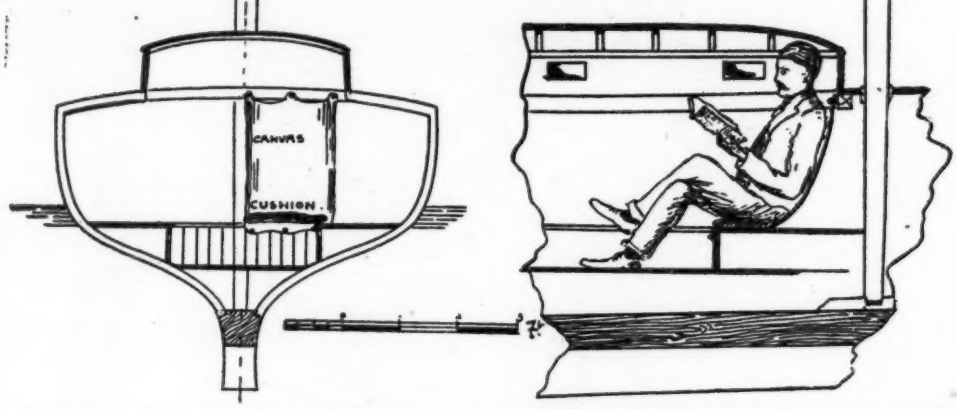
THE majority of cases of hard starting in gasolene engines is due either to weak batteries or poorly adjusted coils, so that a good spark is not had. In case of hard starting, first make sure that the switch is turned on, valves opened, carburetor primed, and wiring connections tight. If the engine does not start after the full charge has been drawn in prime the cylinders either through the priming cups or through the spark-plug opening, if there are no cups. If the engine now explodes two or three times, and then stops, the trouble may be diagnosed as lack of gasolene and failure to draw in the proper charge. Should the engine slow down with black smoke from the exhaust the indication is that there is too much gasolene and the mixture is too rich. If it stops quickly and backfires through the carburetor the mixture is too weak.

Another cause of hard starting is too much air, due to leaving the auxiliary air valve wide open at low speed. This can often be remedied by putting the hand over the air intake while rocking the flywheel so as to draw in a rich initial charge. Lack of compression also is a cause of hard starting.

In 4-cycle engines the valves may be the cause of hard starting, due to improper adjustment of the lift rod or to the stem being gummed and sticking. When the valves do not seat properly part of the compression is lost and the mixture may be blown back through the carburetor. A common rule for adjusting valves is to have the space between the valve stem and the lift rod at its lowest point equal to the thickness of a calling card.

Seat for a Small Trunk Cabin Boat

EVERY one who has cruised in a boat of the trunk-cabin variety has experienced the difficulty of finding a back to a seat in this type of boat where there is no head room under the side decks. The accompanying sketch from *Yachting Monthly* shows a very ingenious method of providing a comfortable seat in a small cabin boat of this type. It consists in a strip of canvas with grommets at either end, one end of which may be fastened to the deck beam at the forward end of the cabin trunk, or sill, the other to the front edge of the transom. With a cushion on top this makes a fine seat with a back such as is found in the deck chairs which used to be seen in the old sailing ships.



SEAT FOR A SMALL TRUNK-CABIN BOAT

Need of an Outboard Motor for Auxiliary Power in Sail Boats

AN English yachtsman, who is an out-and-out windjammer, yet who appreciates power at times in every sailboat, points out, in a letter, the need that exists for a new type of outboard motor suitable for the small sailing yacht. The existing types of outboard motors, he says, are more suitable for rowboats than yachts. It should not be difficult to design an engine capable of being clamped on deck or in the cockpit which would drive a vertical outboard shaft, such as the existing motors have, by means of a chain or connecting shaft. Such a motor would suit any boat of moderate size, and would save great expense in structural alterations, in addition to the advantage of leaving the boat a pure and simple sailer when the propeller shaft was unshipped. It should pay the builders of some of the outboard engines to turn their attention to an engine of this type, especially now that the two-cylinder engines are on the market, and sufficient power could be had to drive boats of fairly large size without undue vibration.

MOTOR BOATING IN WAR TIME. "THE FLOATING MINE," AS DRAWN BY JACOB BELSEN IN THE RULEVOY, PETROGRAD

Long Voyages in Small Boats

An account of the Many Attempts, Successful and Unsuccessful, to Cross the Atlantic Ocean in Small Boats. Many Forgotten and Almost Unrecorded Voyages Recalled. The Little Vessels and Their Daring Navigators.

PART II

BY C. G. DAVIS

IN spite of his previous hard luck, Capt. Andrews again essayed to cross the ocean in July, 1892, in a smaller boat than he had ever before tried. Capt Andrews at this time was a tall, well-built man forty-nine years of age, of blonde complexion and keen, blue eyes, a pianomaker by trade and a man who courted notoriety. He was married, and had several children and grandchildren about Boston, his home town.

The Flying Dutchman, as he called this latest boat, was to sail from Atlantic City, N. J., where he had built her, to Palos, Spain, in about fifty days, as he estimated.

She was a double-ended craft, somewhat like a sneak-box, 14 feet 6 inches in length and 5 feet 5 inches in width, with a depth of nearly three feet. The sides, bottom and deck were of ½-inch cedar, covered with canvas, then oiled and painted. A small two-foot by three-foot cockpit was built in, watertight, with dry-stowage below decks. She was not sub-divided into airtight compartments, as one might expect, with a keel of 300 pounds of lead under her. Her rig was a sort of sliding gunter mainsail, with a jib. The mast was 8 feet above deck and the boom 13 feet long with a 10-foot gaff, the total spread being 15 square yards.

There was some delay about the start, but he did eventually leave Atlantic City, and that was the last ever seen of Capt. Wm. A. Andrews or the Flying Dutchman.

A similar fate is recorded for a Capt. Gardiner, who left Sherbrooke, Nova Scotia, about the year 1895, in a boat 15 feet long and 5 feet wide, for Falmouth, England. He was spoken several times by passing vessels, but some time later the wreckage of a small boat was passed about 900 miles west of Gibraltar.

By far the most remarkable voyage in a small boat is that made by Capt. Joshua Slocum, single-handed, around the world in the yawl Spray, a Connecticut oyster smack 37 feet long, 14 feet 2 inches wide and 4 feet 2 inches deep. Like his voyage in the Liberdade, the Spray's voyage has

ABIEL ABBOTT LOW, THE FIRST POWER BOAT TO CROSS THE ATLANTIC. SHE WENT FROM NEW YORK TO FALMOUTH, ENGLAND, IN 1902 IN 37 DAYS

THE FAMOUS YAWL SPRAY, WHICH WAS SAILED SINGLE-HANDED AROUND THE WORLD BY CAPT. SLOCUM, 1895 TO 1898

been written up by the captain himself and published in book form. I went down aboard of the Spray when she arrived in New York in 1898 and had a long yarn with her captain. The Spray left Boston on the 24th of April, 1895, and arrived back at Newport, R. I., June 27, 1898, having been away 3 years and 2 months.

The year following Spray's departure, in 1896, two young men, George Harbo and Frank Samuelson, rowed in a lightly built, double-ended, lap-strake rowboat called the Fox, in honor of Mr. Richard K. Fox, of the Police Gazette, from New York to Havre, France. They left the Battery, New York Harbor, on June 6, and 55 days later landed at the Scilly Isles, where they rested a couple of days, and then rowed on, arriving at Havre August 7. The newspapers of the day give a good account of this trip. They were capsized once, but the air tanks in the ends of the boat kept her up and helped right her, and as each man had a rope about his waist, they regained the boat, bailed her out and went on. The S. S. Fuerst Bismarck sighted them on June 16. On July 1 the schooner Leader offered to take them back, but they declined and rowed on. On July 10, while riding to a sea anchor in a gale well off the banks of Newfoundland, they were capsized. On July 15 the Norwegian bark Cito, bound from Quebec to Pembroke, picked them up and gave them the first warm food they had had since the capsize, when much of their outfit was lost.

The Norwegian bark Eugene, from Halifax for Swansea, next sighted them and supplied them with bread and water, and on August 1 land, the Scilly Isles, was sighted and reached.

The next small boat to cross was the sloop Great Western in 1899, commanded by Capt. Howard Blackburn, who, alone, sailed from Gloucester, Mass., to Gloucester, England, in 62 days. A remarkable thing about this was that Blackburn was without hands and feet, as they had been frozen and amputated as the result of a winter fishing trip he had made.

In 1901 Captain Blackburn again crossed the Atlantic alone, this time in the 25-foot sloop Great Republic, sailing from Gloucester, Mass., to Lisbon, Portugal, in 39 days.

Almost as remarkable as the voyage of the Spray was that of the Tilikum, a rebuilt Alaskan war canoe 40 feet long, 5 feet 6 inches beam and 18 inches draught, 10 inches of which was a false keel fitted to her 500 pounds of ballast. Capt. J. C. Voss, a Canadian, undertook this trip on a wager of $5,000 that he could beat Capt. Slocum's achievement. This unique craft was decked over, a small cabin and cockpit were built amidships, and she was rigged with three small masts as a fore-and-aft schooner with one jib and leg-o'-mutton spanker.

The Tilikum sailed from Victoria, B. C., on May 22, 1901, with Capt. Voss and Mr. Luxton, who had started the wager, on board. She visited the South Sea Islands, Australia, New Zealand, Torres Strait, Arafura Sea, Indian Ocean, Cape of Good Hope, across the South Atlantic to Pernambuco, then by way of the Azores to England, where, after being exhibited, she was sold.

Her cruise occupied 3 years 3 months and 12 days, and it is calculated she sailed in all about 40,000 miles.

In 1902 a queer, flat-sided, flat-bottomed yawl, named the Nina, sailed by a man named Frietsch, tied up in the basin at the Battery, New York, having come by way of the inland waterways and canals from Milwaukee, Wis. I looked her over one noon-time, and of all the rough-looking jobs of boat-building she was the worst piece of patchwork I think I ever saw. Butts were so numerous in her side planks as to make one think, as one spectator put it, that she was built of pieces of packing boxes. Her gear was of the poorest and yet, after being stocked up by donations from spectators and given a free tow by the tugboat Wm. C. Nicoll, she did manage to arrive on the other side, where, I believe, she went ashore and was wrecked.

It was this same year that the Abiel Abbott Low, the first motorboat to cross the ocean, was navigated across by Capt. W. C. Newman, then forty years old, and

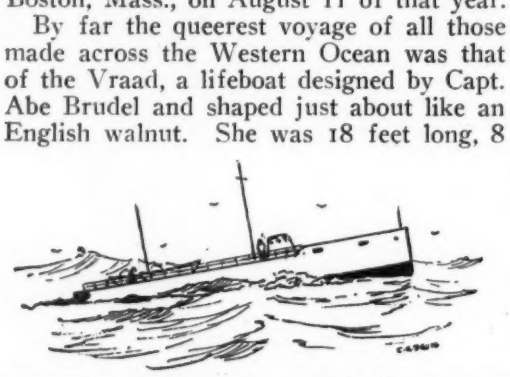
ONE OF THE MOST DARING TRIPS ACROSS THE ATLANTIC WAS MADE BY TWO MEN WHO ROWED THE BOAT FOX FROM NEW YORK TO HAVRE, FRANCE, IN 1896

his sixteen-year-old son, C. E. Newman, of College Point, L. I.

The Low was a trunk-cabin launch 38 feet long, 9 feet beam, drew 3 feet 8 inches of water and had 2 feet 3 inches least freeboard when she started with 800 gallons of kerosene fuel for the 10 horsepower motor, 250 gallons of fresh water and food for 60 days. She left New York July 9, 1902, at 11:25 A. M., and at 6 P. M. on August 14 arrived at Falmouth, England, having consumed about 440 gallons of fuel. She continued on in easy runs to London, where she tide up in the West India Dock at 3 P. M., September 20.

In 1903 Capt. Ludwig Eisenbram is accredited with sailing the Columbia II, a little ship only 19 feet long and 6 feet wide, from Boston to Gibraltar in 101 days. How authentic this is I do not know, but a notice in the November 21, 1903, issue of the *New York Times* announces his arrival at Gibraltar on November 20 and says he left Boston, Mass., on August 11 of that year.

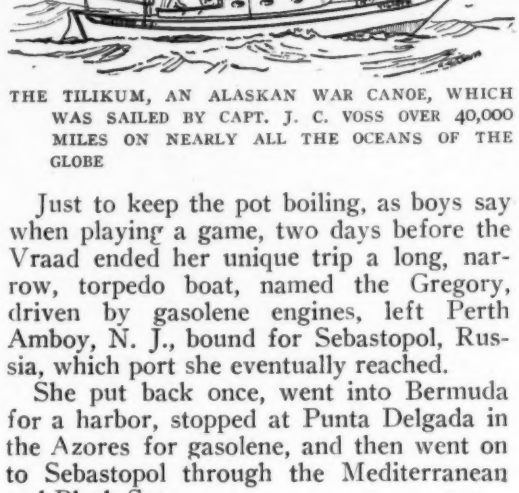
By far the queerest voyage of all those made across the Western Ocean was that of the Vraad, a lifeboat designed by Capt. Abe Brudel and shaped just about like an English walnut. She was 18 feet long, 8



THE GREGORY, WHICH CROSSED FROM NEW YORK TO SEBASTOPOL IN 1905, WAS A GASOLENE-ENGINED TORPEDO BOAT BUILT FOR THE RUSSIAN GOVERNMENT

feet wide and 8 feet deep, built of ⅛-inch boiler plate iron riveted to circular iron frames. She drew 4 feet of water and a heavy wooden buffer at the water line acted as a bilge-keel to stop her rolling. Above water one port light on each side forward admitted light and air, and she was navigated from below in stormy weather. A hollow steel mast 20 feet long, stepped away forward, raked aft, and carried a lug sail of 250 square feet.

Capt. Brudel, then twenty-three years of age, started from Aalesund, Norway, on June 27, 1904, with three companions, Ivor Thorson, Lars Madsen and Carl Johnson. They had fine weather crossing the ocean, but gale after gale made it wet sailing from the Bay of Fundy down the New England coast. They were three times blown out to sea by screaming nor'westers, but, their boat being fitted with a centerboard, they were able to beat back each time, and finally landed high and dry on the beach at Gloucester on January 7, 1905, having mistaken the lights along the shore for the anchor lights on vessels in the harbor. The peculiar shape of this craft recalls to mind the various attempts to navigate the rapids of the Niagara in barrels in 1887 and 1889.



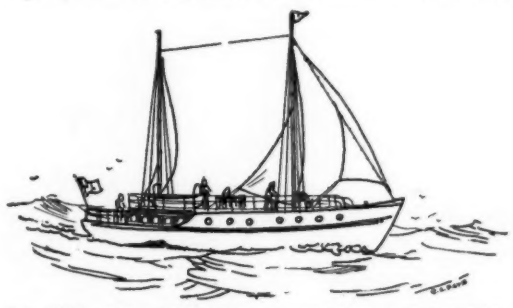
THE TILIKUM, AN ALASKAN WAR CANOE, WHICH WAS SAILED BY CAPT. J. C. VOSS OVER 40,000 MILES ON NEARLY ALL THE OCEANS OF THE GLOBE

Just to keep the pot boiling, as boys say when playing a game, two days before the Vraad ended her unique trip a long, narrow, torpedo boat, named the Gregory, driven by gasolene engines, left Perth Amboy, N. J., bound for Sebastopol, Russia, which port she eventually reached.

She put back once, went into Bermuda for a harbor, stopped at Punta Delgada in the Azores for gasolene, and then went on to Sebastopol through the Mediterranean and Black Seas.

An unfortunate ending in the last stage of her voyage blotted out the yawl Pandora on her trip across from New York to England after coming around the Horn, all the way from Bunbury, Western Australia, which port she left May 3, 1910.

Built very much on the same model as the famous Spray, the yawl Pandora was 37 feet long, 14 feet beam and drew 4 feet of water. Capt. George Blythe, of Coventry, England, the owner, and Capt. Peter Arapakis, her navigators, had some adventures to tell when the Pandora anchored in Gravesend Bay on June 23, 1911. They had touched at Melbourne on May 29, 1910; Sydney, Australia, on August 16; Auckland, New Zealand, September 4, where repairs kept them until October 2, when they sailed for Pitcairn Island. On the 21st of November this land was left astern, and December 12 Easter Island was reached. On January 16, 1911, the little vessel passed Cape Horn, and in a nasty gale on January 22, while both men were below, Pandora was rolled completely over by a huge sea, came up dismasted, and was towed into the West Falkland Islands by a whaler, where repairs were made. On March 4 she left for St. Helena, leaving there April 26 for Ascension Island, where she arrived May 3, 1911, and from there she made the run to



IN 1911, THE ROMANIA, A 50-FOOT POWER BOAT, STARTED TO CROSS THE ATLANTIC BUT WAS WRECKED ON THE NOVA SCOTIA COAST

New York, only to reach the port of missing ships when the end was so near, as she never was reported after clearing Sandy Hook, bound for England.

Three attempts to cross the Atlantic were made in the year 1911. Two boats were wrecked, and one, the smallest, crossed safely. The sloop Theresa, built at New Bedford in 1864, 45 feet long, 17.7 feet beam and 4.5 feet draught, with a 20-horsepower gasolene motor, sailed from Narrangansett Bay for the Cape Verde Islands with Capt. Joaquin Rene, Jose Fonseca and Manuel Andrade aboard, but she never arrived. She was so old and rotten she split in two and sunk, and a steamer rescued her crew.

A 50-foot motorboat, named the Romania, 12 feet wide and 5 feet deep, fitted with a 37-horsepower gasolene motor, and commanded by Capt. John Weller, who built her at Carlstadt, N. J., started from Bridgeport, Conn., July 19. She was completely wrecked on Chelbogue Point, Yarmouth,

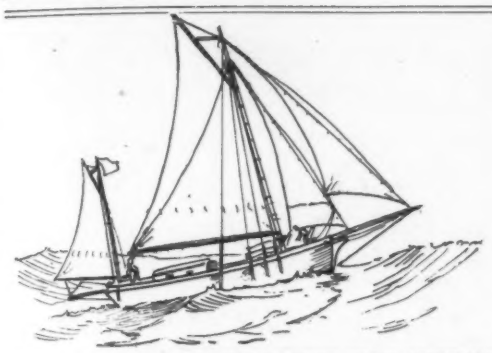
THIS QUEER 18-FOOT LIFEBOAT VRAAD CROSSED THE ATLANTIC IN 1905, BUT TOOK 221 DAYS TO DO IT

Nova Scotia, on July 25, but her crew were all saved.

The smallest boat of the three, the little 25-foot skip-jack yawl Sea Bird, with Capt. Thomas Fleming Day, of New York, and Fred B. Thurber and Theodore R. Goodwin, of Providence, R. I., made a quick and safe passage across in June, 1911. Sea Bird was fitted with a single-cylinder 3-horsepower motor. She was 8 feet 4 inches beam, 3 feet 8 inches draft and carried 400 square feet of sail.

She left Providence, R. I., on June 10 and arrived at Fayal July 1. From there she sailed on July 5 for Gibraltar, arriving on July 17. Here she was carried on the davits of the steamship Moltke to Naples and proceeded from there under her own power to and up the Tiber River to Rome, arriving July 24.

Detroit, the 35-foot, double-ended, motor lifeboat, which crossed the Atlantic in 1912 with Capt. T. F. Day, Wm. Moreton, Charles E. Earle, Jr., and Wm. Newstead aboard, was built at Port Clinton, Ohio, for Com. Wm. E. Scripps, of Detroit, Mich. She was 10 feet beam, had a draught of 5 feet when loaded and a displacement of 14 tons. The entire midsection, under her



THE YAWL PANDORA, WHICH SAILED FROM AUSTRALIA IN 1910 AND ARRIVED AT NEW YORK 14 MONTHS LATER. SHE WAS SUBSEQUENTLY LOST IN CROSSING THE NORTH ATLANTIC

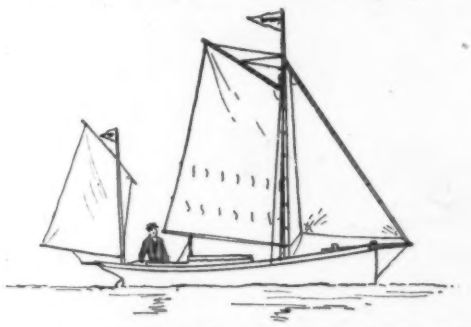
deck, was filled with big steel tanks, which, with two tanks on deck, carried a total of 960 gallons of gasolene. The crew lived down forward and the engine room was away aft, with a raised hatchway to keep the water out.

Launched on June 25, 1912, Detroit arrived in New York by way of the Great Lakes and Erie Canal on July 12 and fitted out at the yard of George Stelz, College Point, L. I., where the previously mentioned Abiel Abbott Low was built.

On July 14 she left the New Rochelle Yacht Club, but stopped at Cottage City on the island of Martha's Vineyard to fill her tanks and let the skipper say good-bye to his family, who were summering there. Leaving Vineyard Haven July 16, 1912, Detroit arrived in Queenstown, Ireland, on August 7, her 16-horsepower, 2-cylinder motor driving her about six miles an hour. From here she visited Cork and many seaports en route, eventually arriving at St. Petersburg, Russia, on September 12.

In emulation of the Sea Bird's trip the Sea Queen, built from the same plans as the former, started from Ugada, Japan, on the 30th of July, 1913, on a world-girdling trip, in command of Capt. J. C. Voss, of Tilikum fame, and Messrs. Stone and Vincent as crew. Head winds at first delayed and then a typhoon put an end to that venture by completely dismasting her on August 30, and the venturesome sailors considered themselves extremely lucky in reaching Habu, Japan, on September 10, under a jury rig.

Among the many unsubstantiated voyages in small boats may be mentioned that of Capt. James Cassels, of Glasgow, and

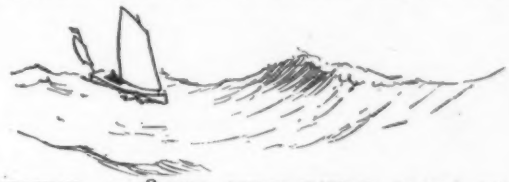


ROB ROY, A 21-FOOT YAWL, IN WHICH JOHN MACGREGOR MADE SOME LONG SINGLE-HANDED CRUISES

John C. Maloney, of Ennis, County Clare, Ireland, who claimed to have crossed the Atlantic in 97 days in a 32-foot auxiliary sailboat, named the Imp, which arrived at Halifax on June 25, 1914, an account of which appeared in the New York *Herald* in July, 1914. They claimed to be on their way to San Francisco by way of the Panama Canal.

The Imp was said to have left Dublin, Ireland, on March 14. Rough weather was experienced from the time she left Queenstown, four days after leaving Dublin, but she not once used her motor.

Another account, which appeared in a New York newspaper, says that on July 13, 1914, an aged man, named E. Holborrow Cripples, started from West Bay, Bridport, to cross the Atlantic in a small sailboat made entirely by himself and had "taken forty gallons of water and half a hundredweight of biscuits in addition to other provisions." Much interest was shown in his departure. As an illustration of how accounts become twisted this item appeared in another publication, saying that



PROCYON, A 28-FOOT SINGLE-HANDED LUGGER, IN WHICH R. T. M'MULLEN MADE SOME LONG OCEAN VOYAGES

a cripple had started single-handed to sail across the ocean.

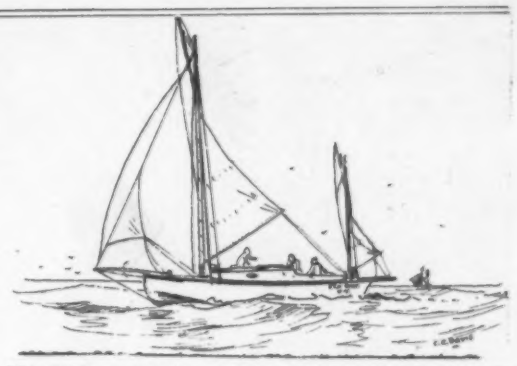
It was about 1894 or 1895 that the 58-foot yacht Norton, built with a patent water ballast system of bottom construction, put to sea from New York and was never again heard from. She was of 12 feet beam and, with full bunkers of 8 tons' capacity and stores for her crew of ten aboard, she drew 6 feet 4½ inches.

Capt. Francis L. Norton, his wife and niece and a crew of seven were cooped up in this midget steamer, which carried an auxiliary yawl rig to help her along in fair weather.

I remember how shipping men gravely shook their heads when this boat's attempt was under discussion before she sailed.

Capt. Norton had crossed before in small boats. He and his wife made the trip a few years previous in the 36-foot yawl-rigged yacht Neversink to the Paris Exposition, and in 1880 he made the passage from Boston to London in the yacht Ocean Pearl.

When C. P. Kunhardt published his big book, "Small Yachts," in 1885, he gave in it a list of books recounting adventurous sea trips in small boats, mostly English, such as The Cruise of the Widgeon, a 10-ton yawl that was sailed 700 miles from Swanage to Hamburg, by C. E. Robinson. Other books mentioned were the Cruise of the Silver Cloud, by Wm. Forwell, a 1,000-mile voyage in an open boat, from Dundee,



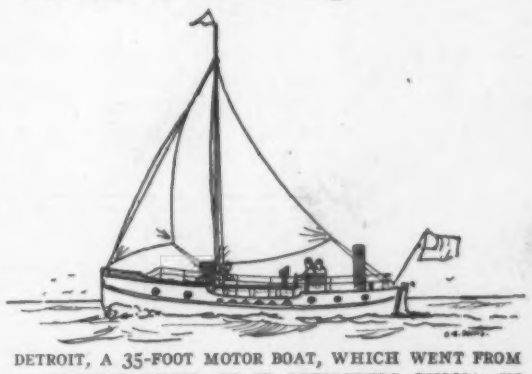
SEA BIRD, A LITTLE 25-FOOT YAWL, WHICH CROSSED FROM PROVIDENCE TO GIBRALTAR IN 33 DAYS

Scotland, to France and back; the Orion, or How I Came to Sail Alone in a 19-Ton Yacht: and the Cruise of the Procyon, a single-hand voyage by R. T. McMullen. An illustration is given elsewhere in Small Yachts showing this little lugger in a heavy sea, and there is also a picture of the yawl Rob Roy, a 21-footer, in which John Macgregor made long cruises alone. The longest voyage described in these books is the Cruise of the Falcon, an account of a voyage from England to Paraguay and to the West Indies in a 40-ton yacht.

While most of these books are accounts of exploits that can hardly be classed with the trans-Atlantic trips described, they are, nevertheless, worth knowing about to those interested in single-handed cruises.

Testing Gasolene in Tanks

While in a number of tank installations in large boats there are gauges to show the amount of gasolene in the tank, in a small boat, by far the most common method to find the amount of fuel is to test with a gauge stick or rod through the filling plug. Be careful in doing this to see that either the measuring stick or wire which you use is clean and free from any particles of dirt or loose fibres. Any particles of foreign substance that find their way into the spray nozzle of the carburetor are apt to cause a great deal of trouble. In new tanks that have not been properly cleaned the fuel supply pipe is apt to become clogged and stopped up. If this happens the pipe must be disconnected and blown out. A common hand tire pump (small size) is a handy thing to do this with and is immeasurably better than the human lungs.



DETROIT, A 35-FOOT MOTOR BOAT, WHICH WENT FROM DETROIT, MICH., TO ST. PETERSBURG, RUSSIA, IN 1912, IN CHARGE OF CAPT. T. F. DAY. SHE CROSSED THE ATLANTIC IN 21 DAYS 16 HOURS

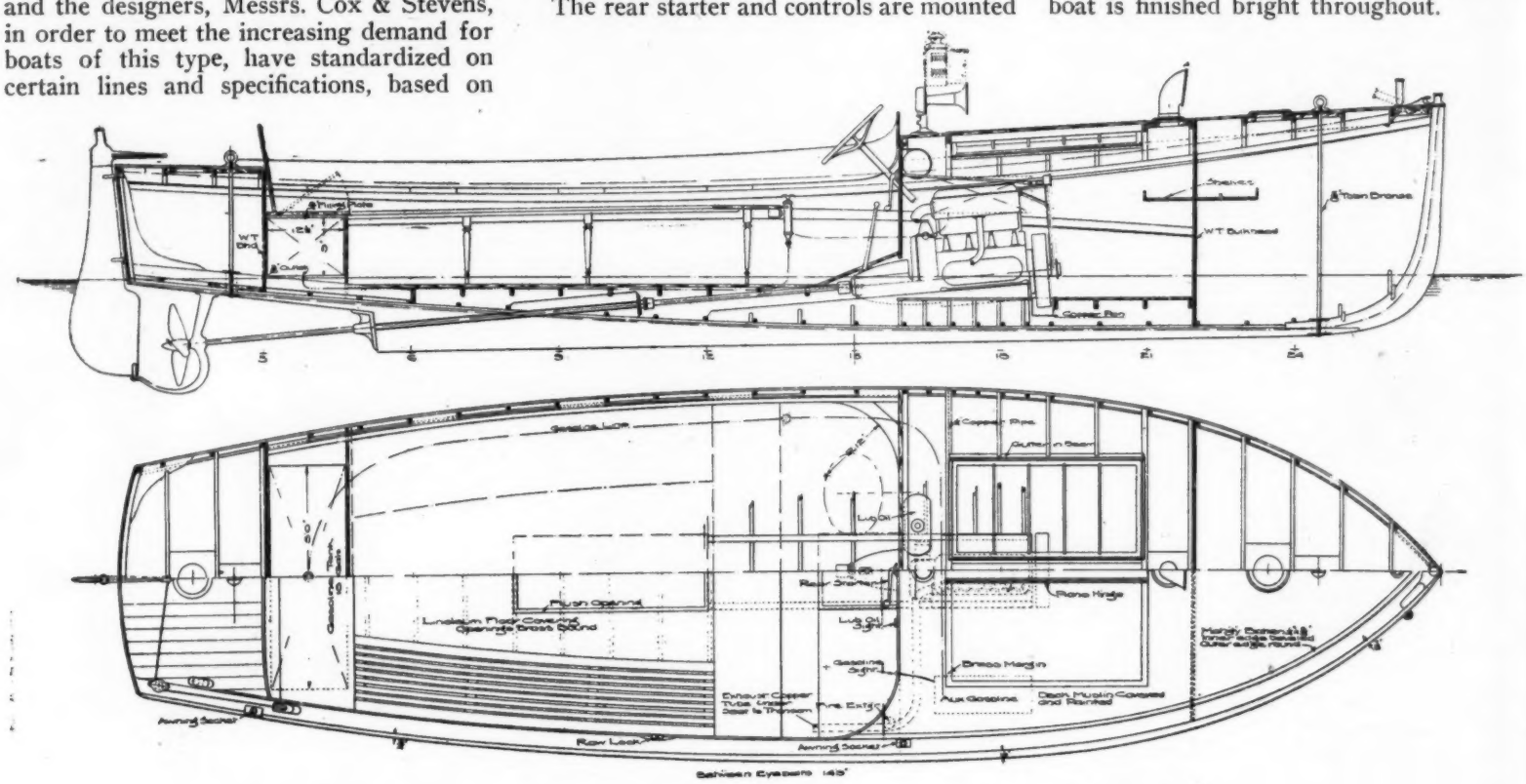
AN 18-FOOT POWER TENDER FOR THE MOTOR YACHT SHREWSBURY

An 18-Foot Power Tender

THE accompanying plans show an owner's launch, built for Mr. Uzal McCarter, of Newark, N. J., for his power yacht Shrewsbury. Much more care and attention is given to power tenders in the present day than is generally believed, and the designers, Messrs. Cox & Stevens, in order to meet the increasing demand for boats of this type, have standardized on certain lines and specifications, based on years of practical experience covering this field.

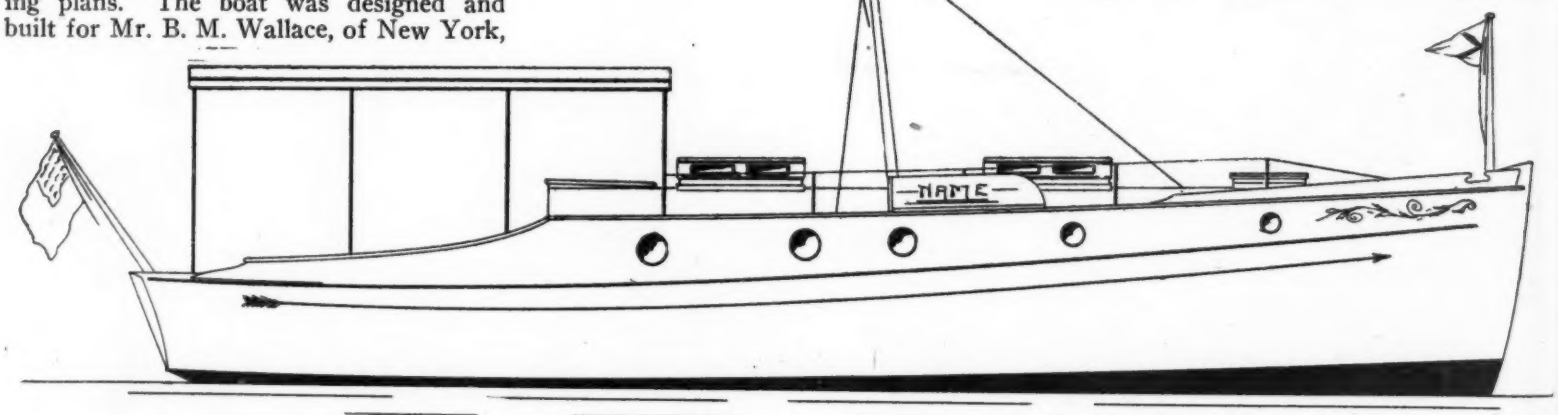
This little boat, which is one of their standard types, is 18 feet overall, 5 feet beam, 1 foot 6 inches draught. A 10-horsepower Sterling Kid motor gives her a speed of 12 miles per hour. Total weight with full equipment 1,025 pounds.

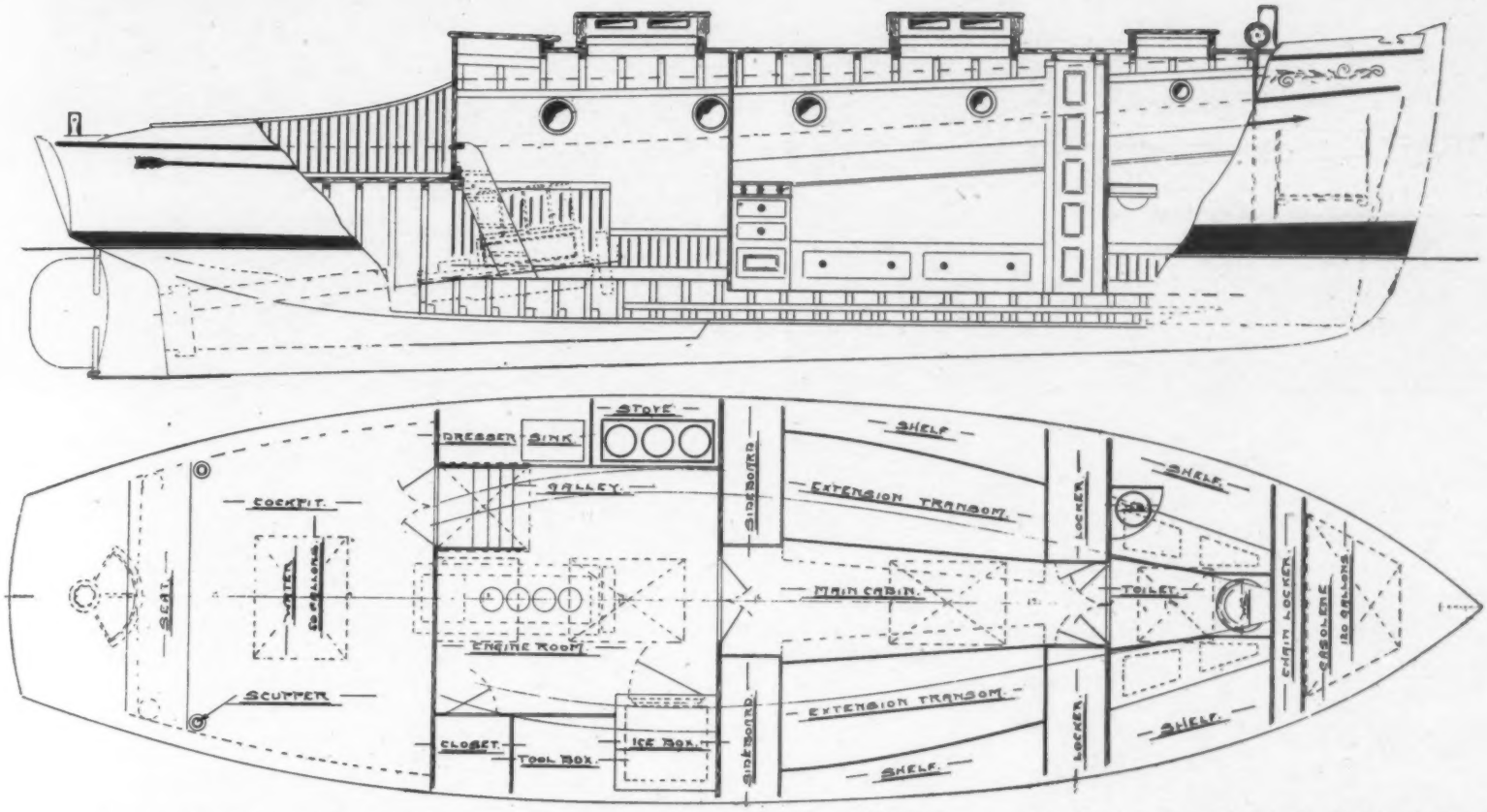
The rear starter and controls are mounted on the bulkhead abaft engine compartment, enabling the boat to be handled like an automobile. All arrangements have been carefully worked out for reliability and convenience. The hull is of white cedar, lapstrake, frame and keel white oak, and all trim mahogany. Fastenings, hardware and mountings are of copper and bronze, and the boat is finished bright throughout.



A 36-foot Cruising Launch

A ROOMY 36-foot cruising power boat, from designs by E. B. Schock, N.A., is shown in the accompanying plans. The boat was designed and built for Mr. B. M. Wallace, of New York, and is fitted with a 20-horsepower Ralaco engine. The principal dimensions are: Length overall, 36 feet; waterline, 33 feet;



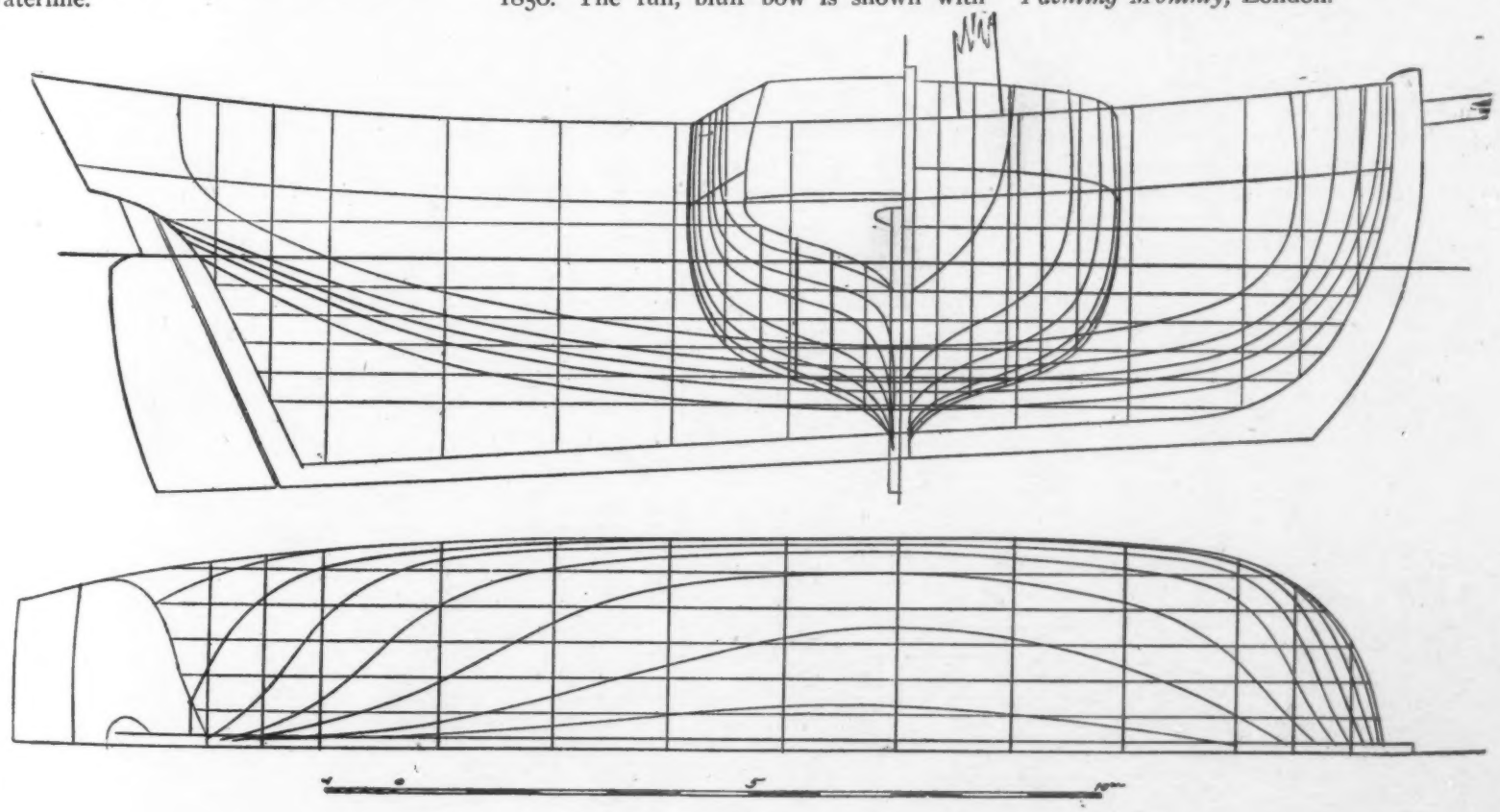


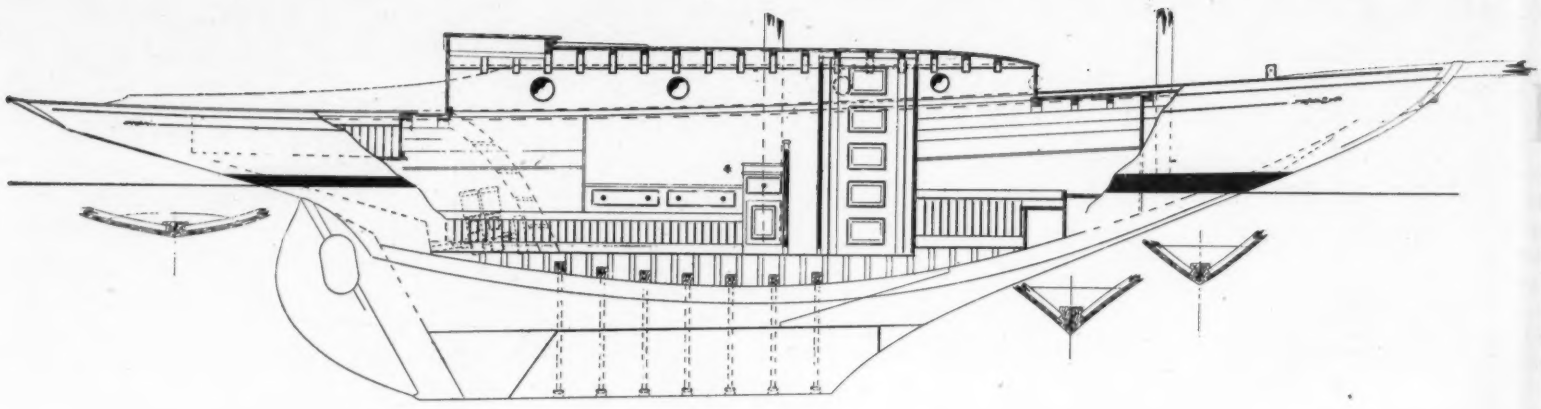
beam, 10 feet, and draft, 3 feet 3 inches. The owner's requirements called for a large main cabin, so that the raised deck was carried well aft. This gives a large engine room, in which is located the galley and ice box, while forward is the main cabin with extension transoms, sideboards, clothes lockers and good shelf room. Forward of this is a large toilet room, while in the forepeak are located the chain locker and a 120-gallon gasolene tank. The cockpit is roomy and watertight, the floor being above the waterline.

An English Cutter of 1810

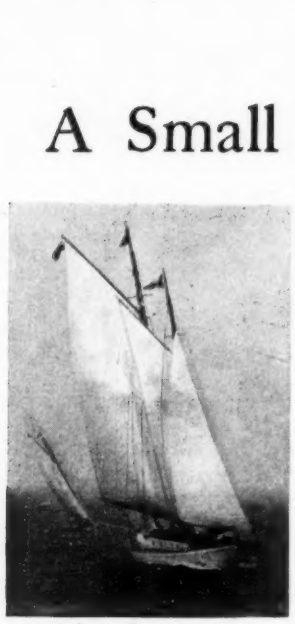
THE accompanying lines of an English cutter of the period of 1810 are particularly interesting as showing the type of boat used for the rough water of the English coast at that period. The lines indicate a transition between the older types of men-of-war and royal yachts of the middle of the eighteenth century, two of which were shown in recent issues of YACHTING, and the more modern cutter subsequent to 1850. The full, bluff bow is shown with clean, long run, the body being full with considerably more deadrise than was the case with the older models and men-of war. The principal dimensions of this boat were: Length, 65½ feet overall; 55 feet 9 inches waterline; 19 feet 8 inches beam, and 10 feet 8 inches draft.

This particular boat was an English cutter, which was made a prize by the French and taken into Boulogne in 1810, where she was measured and her lines subsequently taken off. They were reproduced in *Yachting Monthly,* London.



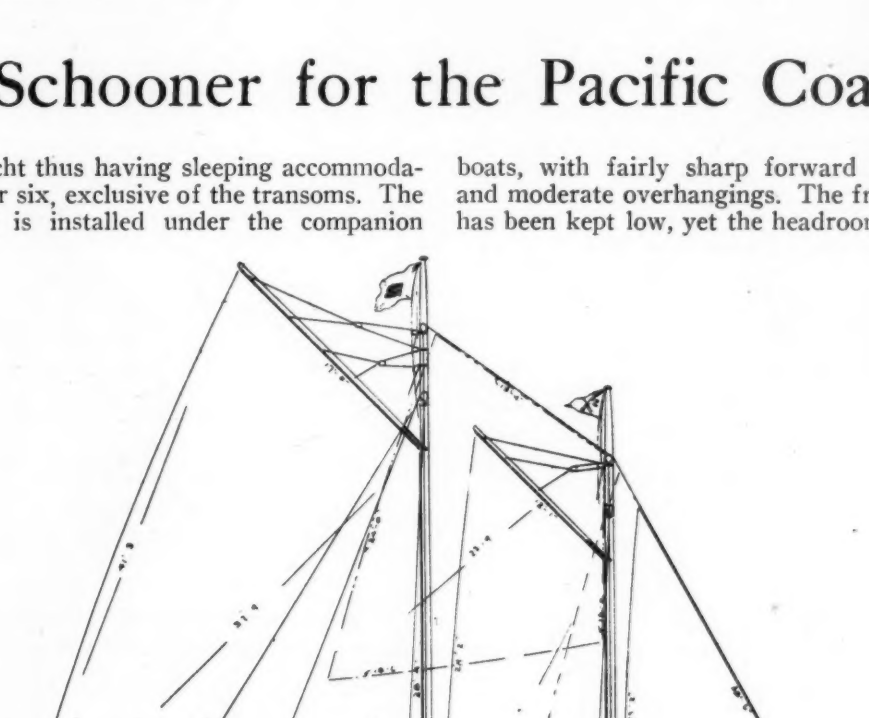


A Small Auxiliary Schooner for the Pacific Coast

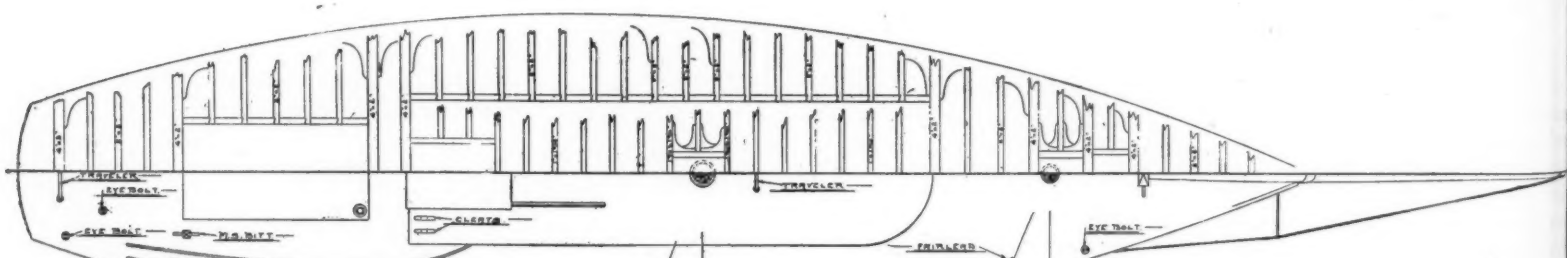


MANY of our readers will remember Edson B. Schock, a naval architect, who was formerly located in New York and who designed, among other boats, the Berneyo, which won the Havana Power Boat Race a number of years ago. Mr. Schock is now located at Seattle, Wash., and the plans reproduced herewith are of a small auxiliary schooner which he turned out for the Messrs. Thicke, of the Royal Vancouver Yacht Club. The yacht was designed for cruising, with a fair turn of speed. Her principal dimensions are: Length overall, 45 feet; length waterline, 31 feet; beam, 11 feet; draft, 6 feet 6 inches, while she carries 1,100 square feet of sail in jib, foresail and mainsail. The interior layout shows a stateroom forward, partly under the cabin trunk and partly under the forward deck, with a berth on either side. Abaft this stateroom and separating it from the main saloon is a galley on the starboard side and toilet room on the port side, the former being equipped with a Shipmate coal range, sink, etc.

The main cabin has four full-length built-in berths with transom seats in front, the yacht thus having sleeping accommodation for six, exclusive of the transoms. The engine is installed under the companion steps and the narrow bridge deck, and is of 7½ horsepower. It drives her at a moderate speed in a calm, which is the only time it is intended to use it. In form the yacht resembles the modern Universal Rule boats, with fairly sharp forward sections and moderate overhangings. The freeboard has been kept low, yet the headroom below is over six feet, without spoiling the proportions of the boat by an unduly high house.



A small fisherman's staysail is carried for use on a reach. The ballast is all outside.



The End of the Famous Portsmouth

IN the passing of the old U. S. sailing sloop Portsmouth, which has just been condemned and sold at auction by the Government, one of the few remaining links that connected the old navy with the new has been severed, and one more stately and picturesque square-rigger has been consigned to the limbo of the past. This leaves only a few old frigates still on the navy lists and it looks as if square-rigged seamanship in the navy will soon be a lost art.

In her day the Portsmouth was always considered a particularly fine, handsome and efficient vessel. It was in July, 1846, that this ship, then new from Portsmouth navy yard, where she was built, took possession for the United States of the Bay of San Francisco. War with Mexico had begun the previous May, and an American fleet and a British battleship, the Collingwood, raced for San Francisco Bay. The Yankees got there first. In commemoration of this event a square in San Francisco City still bears the name of the Portsmouth.

Ten years later, in November, 1856, the Portsmouth, under Commander, afterward Admiral, Andrew H. Foote, was one of the squadron that bombarded and destroyed the Chinese fortifications of Canton that had previously fired on the Portsmouth. This was a hot battle; the Portsmouth's launch was sunk while the bluejackets and marines were landing. The Americans had 12 killed and 28 wounded. The Chinese lost about four hundred. In 1862 the Portsmouth was one of Farragut's fleet in the Mississippi, and joined with the mortar-boats in bombarding the fortifications below New Orleans. After the war the old sloop was used mainly as a training ship, for which she was splendidly adapted. Her last connection was with the New Jersey naval reserve.

Though rated as a sloop, the Portsmouth and her sister ships, the Jamestown and St. Mary's (all ship-rigged), were as large as many frigates of the time of Nelson. Few sailing ships, except the extreme clippers, have been as fast. Though heavy-looking above the waterline, the Portsmouth was fine-lined below, and with good officers and a strong crew could be tacked and worked with the utmost precision. On several occasions she was sailed right up through the Lower Bay and Hudson River to an anchorage off Edgewater.

Deterioration of Rope

Large ropes lose strength through rotting much more slowly than small ones, the percentage of inner or protected fibers increasing proportionally to the square of the diameter. In ropes up to about ¾-inch diameter all the yarns appear on the outside of the rope. Working conditions and other things being equal, ropes of these smaller sizes call for replacement more frequently than do the larger ones.

THE FAMOUS SLOOP-OF-WAR PORTSMOUTH WHICH HAS JUST BEEN SOLD BY THE NAVY DEPARTMENT TO BE BROKEN UP AT THE AGE OF SIXTY-NINE YEARS

Hints for the Cabin Table

ONE of the prime requisites for a satisfactory cruise is an efficient galley outfit, and, first of all, there must be a satisfactory stove. If you are going up into a cold climate, such as the Maine coast, by all means have a little coal range of the "Shipmate" type. It's surprissing how much cooking one can do on a small stove of this kind with only two holes, yet with a very complete little oven. This is the smallest size, for very small boats, while the next size takes up surprisingly little room and can do all the cooking that can be done at home, while, in addition, there is always heat to dry out wet clothes and to make the cabin snug on cool nights.

In summer time, however, some of the blue-flame kerosene or alcohol stoves are most used. They are clean, require little care and always leave the pots and pans in good shape. With a three-burner stove with an oven to set over one burner you can do as much cooking as the chef in the Waldorf Astoria. Be sure to carry a sufficient supply of denatured alcohol, if you use a stove of the alcohol variety.

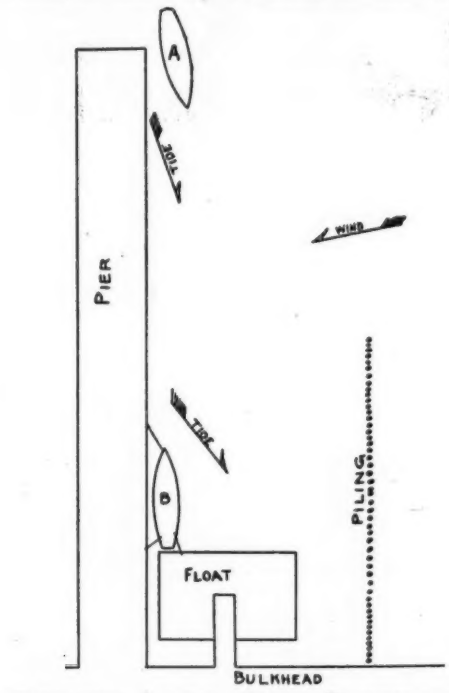
Outside of the regular stock brands of prepared soups, with which every yachtsman is familiar, a pleasing change will be found in the prepared Clam Chowder. Mixed with milk, this makes a most delicious beginning for a meal—in fact, will almost make a meal in itself. If one does not like prepared soups and wants a large pot of made soup, the following formula will be found easy to prepare:

One pound of ground beef put on in two quarts of cold water with two cans of prepared soup vegetables, a little salt and pepper and boiled for half an hour at most, then served with a few Pilot biscuits, makes a real meal for three people at any time.

YACHTING IN THE EARLY SUMMER ON THE NEWFOUNDLAND COAST HAS ITS DISADVANTAGES. THE NARROWS OF ST. JOHN'S, NEWFOUNDLAND, WHEN THE ICE BEGINS TO COME DOWN FROM THE LABRADOR AND GREENLAND COASTS

Answers to the June Seamanship Problem

THE following are some of the answers received to the June seamanship problem. So many answers were received that only a limited number can be given. The problem is described briefly in the accompanying cut:



BRING BOAT A INTO POSITION B ALONGSIDE PIER, WITH TIDE AND WIND AS SHOWN, AND WITHOUT GOING ALONGSIDE OF OR GETTING A LINE TO THE FLOAT. NO. 1 IN POWER BOAT, NO. 2 IN A CATBOAT

Making Use of Wind and Tide

Your seamanship problem in May and June YACHTING are good "dope" and it is interesting to see the differences in such manœuvres.

In problem in June issue: (1) With power boat run in slowly parallel to pier. Make bow line fast to dock or pier and with engine under slow speed it would be a very simple matter to warp boat into position with aid of wind and tide.

(2) With catboat, run in parallel with pier, round up into wind and drop sail; keep hard off to starboard and run in along front of float, and with headway usually found in cats, together with help of wind, run nose up to pier, make bow fast. Wind and tide will do the rest.

G. E. H.

A Nonchalant Catboat Skipper

Replying to seamanship problem, would say that personally I hardly believe I would attempt it, but believe a native of the Catboat country, where cats are handled with a marvel of careless perfection, would get away with it single-handed by placing his boat in position, as shown in diagram, centerboard up and sail dropped in lazyjacks with just enough peak showing to give a little headway against the tide; run for windward end of float, jibe over and, showing *just peak enough,* work her forward gently until, at the proper time, he would walk carelessly forward, incidentally check what little headway she had, but, principally, to pass a line around the particular pile which he had selected.

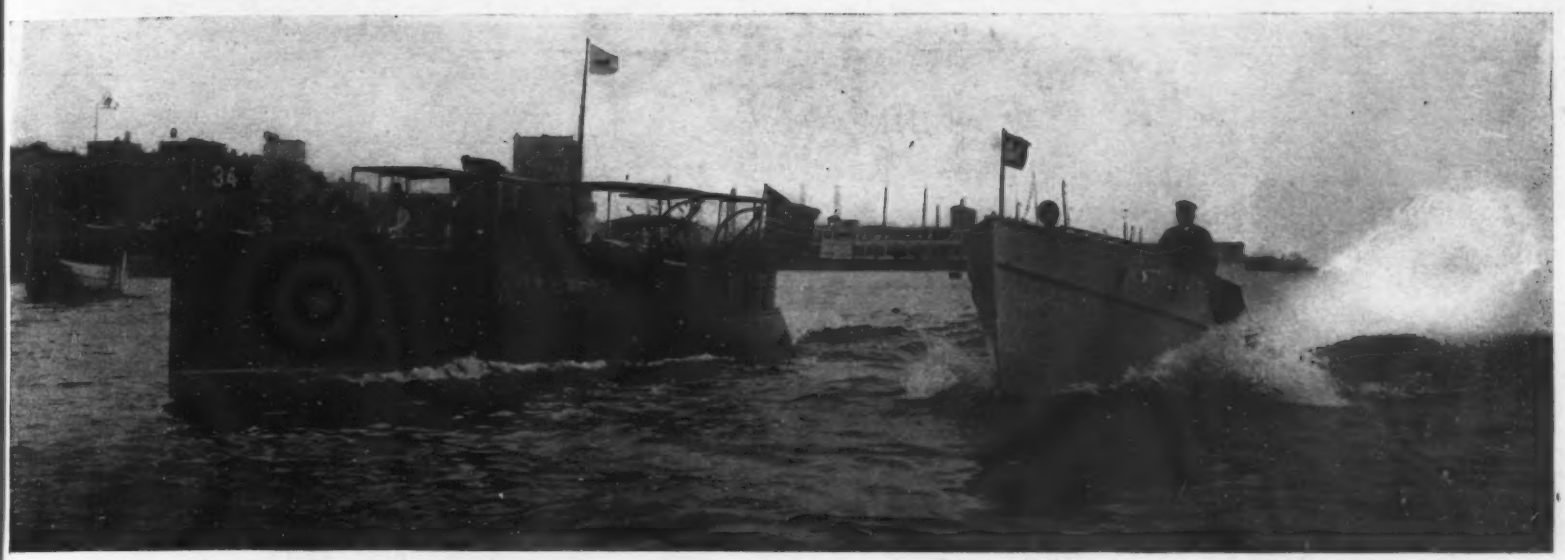
L. M. Watson.

Letting the Tide Help

I should bring a power boat in as follows: Come in from off the end of the pier under one bell, steering toward the end of the piles. When close enough to the piles put your helm and steer toward the pier at the point where you wish to make your bow line fast. When you have your bow line fast the tide will then swing her stern toward the float. Coming ahead under one bell now with the helm hard-a-port, slack off the bow line a trifle and she will come broadside to the pier and you can then make your stern line fast.

With a catboat, when off the end of the pier head toward the piles, gradually getting the mainsail down until you have only a peak of the peak up. Slowly swing in toward the pier to a point where you wish to make the bow line fast, with just sufficient sail up to give her headway against the tide. Make your bow line fast. The tide and wind will then swing her stern in toward the float. Make a line fast on her port quarter and carry the end up on the pier, when you can warp her in and tie up.

Milton W. Price.

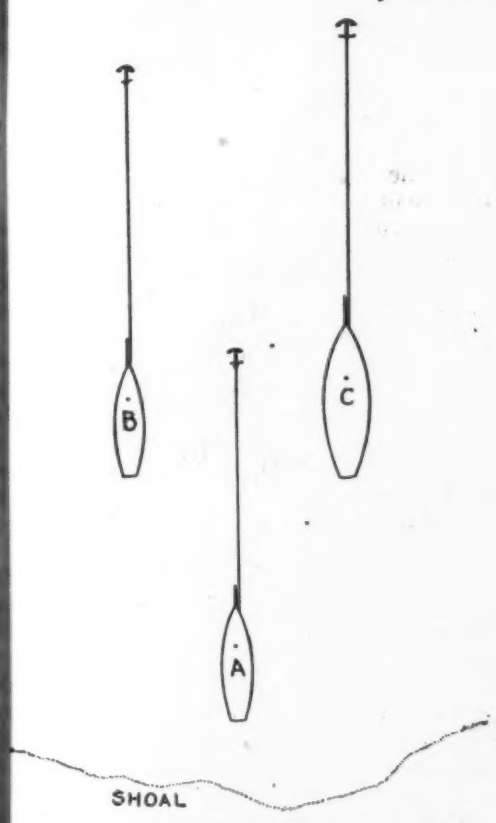


THE OPENING OF THE RACING SEASON IN NEW YORK WATERS. WILFREDA AND RUNAWAY AT THE REGATTA OF THE COLUMBIA YACHT CLUB. THE LATTER (AT THE RIGHT) IS A NEW BOAT THIS YEAR, WITH A SPEED OF 23 MILES

BACKING ON A STARBOARD HELM

I would execute the manœuvre as follows: Head A outside of piling, letting her come in around the end of it on a port helm. Head for the float when off the end of the piling, shut off the engine, and with the helm hard-a-port let her swing as much as she will with engine stopped. Then back her on a starboard helm, which would swing her stern in until she was nearly parallel with the pier. Then go ahead slowly till you get a bow line on the pier and let her drop back to position shown. I don't believe I would try to do it with a catboat.

J. R. T.



Seamanship Problem for July

IN the July problem let it be understood that boats A, B and C have anchored in a harbor, when a gale springs up and A drags down between B and C and is in danger of going ashore, as she has payed out her cable to the bitter end. She wants to get underway and beat out to a safer anchorage. How would she do it without fouling B and C or fetching up on the shore to leeward. A is a keel sloop about 35 feet in length, with two men on board.

Regatta of the Columbia Y. C.

THE motorboat racing season in New York waters was practically opened on June 5 in the races of the Columbia Yacht Club at Eighty-sixth street and the Hudson River. Some new boats were seen at this event, the most interesting being the Runaway, owned by A. C. Cushing, Jr., and the hydroplane Little Joker II, owned by H. S. Ford. The latter boat picked up some driftwood in the river before the race and twisted her propeller so that she could not start. The winners in the various races were: Class 1, Bunk III, owned by C. Firth; Class 1, Second Division, Amorita, W. T. Randolph; Class 2, to Ardsley and return, Invader, owned by C. W. Baird; Class 3, hydroplanes, Little Gunfire, W. J. Brainerd (sail over); Class 4, Satsun, Thomas Farmer, Jr.; Class 4, Second Division, Katydid, J. Van Denberg; Class 5, express cruisers, Runaway, A. C. Cushing, Jr.

Racing News of Interest

Class "P" Boats to Race on Lake Michigan

It appears to be definitely settled that there will be a race between one of the Class "P" boats from the Atlantic coast and the Chicago Yacht Club's new boat in this class, Valiant, for the East-West Cup, which has been put up by the Chicago Yacht Club this year. The date has been tentatively settled, and will probably be the first week in September. The boat expected to represent the East is the Josephine, owned by Addison Hanan, but under charter of a syndicate headed by Commodore W. H. Childs, of the Indian Harbor Yacht Club.

American Speed Boat Championship at Chicago

The Associated Yacht and Power Boat Clubs of America, whose power boat carnival at Chicago had to be called off last year on account of the war, has been scheduled this year for the week of August 28 to September 4, and the committee in charge, with Sheldon Clark, chairman, is busy making plans for the biggest speed boat "meet" of the year. The racing will occupy a full week, and all the "60-milers" and over, from all parts of the United States, are expected to be on hand. The races will be held off Grant Park on Lake Michigan.

Plans for the Gold Cup Races

The races for the Gold Challenge Cup, which was won by Mrs. J. Stuart Blackton last year at Lake George, will be held on Manhasset Bay July 31 and August 2, 3 and 4, under the auspices of the Motor Boat Club of America. The actual management of the event will be in the hands of the Long Island Sound Motor Boat Association, the new local section of the American Power Boat Association. The course will be over a 5-mile triangle, laid out within the Bay so that smooth water will be assured, while the starting and finishing lines will be practically opposite the Manhasset Bay Yacht Club. It is expected that at least ten boats will be at the starting line, for this event is the most important speed boat contest of the year.

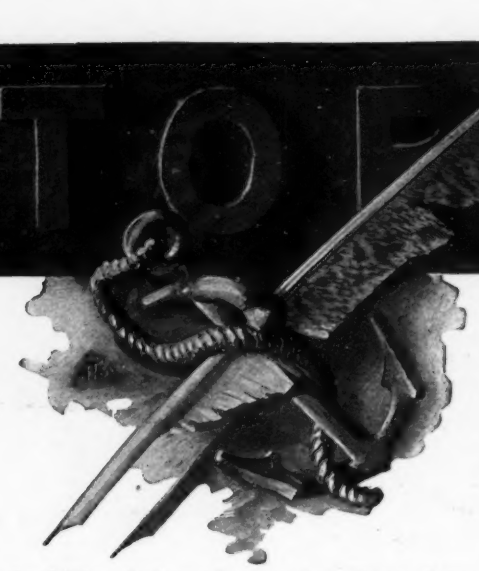
The cup will be defended by Mrs. J. Stuart Blackton's Baby Speed Demon II. Other entries will be Baby Reliance V, owned by J. Stuart Blackton; a new Ankle Deep building for Count C. N. Mankowski, the challenger; the Hawkeye, belonging to a Lake George syndicate (a boat that raced last year, but owing to some engine troubles did not show her true form); Little Joker II, owned by H. S. Ford; the new Disturber, building for Commodore James A. Pugh, of Chicago; a new 20-footer for T. F. Chesebrough; a new boat building, by Adolph Apel at Atlantic City, and also a new Peter Pan, built for James Simpson. On the last day of the meet the mile trials will be held.

It is probable that the races for the Challenge Cups of the National Association will be held on Thursday, Friday and Saturday of the same week following the conclusion of the Gold Challenge Cup races.

The Mississippi Valley Championships to be Decided at Hannibal

The annual regatta of the Mississippi Valley Power Boat Association, which carries with it the Webb Cup, will be held at Hannibal, Mo., July 5, 6 and 7, under the auspices of the Hannibal Boat and Gun Club, one of the latest organizations to become affiliated with the Mississippi Valley Power Boat Association. A cruise from Chicago, Illinois River and Mississippi River points has been arranged to end at Hannibal in time for the regatta. Plans are underway for entertainments every night of the meet. There is promise of a fine fleet of the fastest power boats in the Middle West, and it is expected that Commodore Pugh's Disturber IV will be seen at this regatta for the first time this year.

EDITORIAL



More Motor Boat Legislation

For some time there has been a strong feeling in the Department of Commerce that motorboats, especially those used around crowded harbors and waterways, should be registered and numbered in somewhat the same manner as automobiles. A bill has been drawn up by the Department and will be presented at the next session of Congress. This bill reads as follows:

A BILL

To require numbering and recording of undocumented vessels.

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That every undocumented vessel, operated in whole or in part by machinery, owned in the United States and found on the navigable waters thereof, except public vessels, shall be numbered. Such numbers shall be not less in size than three inches and painted or attached to each bow of the vessel in such manner and color as to be distinctly visible and legible.

Sec. 2. The said numbers, on application of the owner or master, shall be awarded by the collector of customs of the district in which the vessel is owned and a record thereof kept in the customhouse of the district in which the owner or managing owner resides.

Sec. 3. Notice of destruction or abandonment of such vessels or change in their ownership shall be furnished within ten days by the owners to the collectors of customs of the districts where such numbers were awarded. Such vessels sold into another customs district may be numbered anew in the latter district.

Sec. 4. The penalty for violation of any provision of this Act shall be ten dollars, for which the vessel shall be liable and may be seized and proceeded against in the district court of the United States in any district in which such vessel may be found.

Sec. 5. The Secretary of Commerce shall make such regulations as may be necessary to secure proper execution of this Act by collectors of customs and other officers of the Government.

This Act to take effect six months after passage."

A hearing of those affected by this bill was held in Washington June 10, and also on the amendment to Section 4426, Revised Statutes, printed below.

While the sentiment of motorboat men is somewhat divided, most of them, and most of the power boat associations are in favor of the bill as being of more benefit to them than hardship. It does not seem much of a hardship to have to register your boat at the Custom House and to have a number assigned to you, and it is probable that there will be no charge for this registration. The only expense that will be incurred will be the purchase of the numbers that would be required to be displayed on the boats. To avoid large numbers, it is proposed to assign a letter to each customs district, each district to assign its own numbers, beginning with the figure 1; for instance, the number 25-A would mean that the boat was numbered in the Maine district and that the name and address of the owner would be found in the custom house at Portland, Me.

As it is at present there is no way for the inspectors to see that the law regarding equipment is complied with, as many of those inspected and found to have insufficient equipment give false names and addresses. The bill would protect those owners who do equip their vessels properly. Also, without some way of identifying motorboats it is practically impossible to enforce the observance of the rules of the road, while if registered and numbered those boats that are navigated in a careless and reckless manner can readily be brought to account. If the law passes and is *enforced in the spirit in which it is drawn* it should be a benefit, rather than a hardship, to the responsible motorboat owner.

The other changes are in the nature of amendments to Section 4426 of the Revised Statutes and relate to the inspection of the hull and machinery of motorboats under 65 feet in length which carry 20 or more passengers for hire, and to the licensing of the operator of such a boat. The wording of the amendments is as follows:

"(c) That every vessel propelled by machinery other than by steam and every steam vessel not more than sixty-five feet in length from end to end over the deck, excluding sheer, while carrying twenty or more passengers for hire, in addition to the inspection already provided by law, shall be inspected as to the hull and general condition of the operating machinery, and the local inspectors, where certificates of inspection are not now provided for by law, shall issue to such vessels certificates of approval in accordance with the form and regulations prescribed by the Board of Supervising Inspectors. All certificates of inspection and approval issued under authority of this section shall state the number of passengers such inspected or approved vessels can carry with prudence and safety.

(d) The operators of such vessels, * * * * while carrying twenty or more passengers for hire, shall be licensed by the local inspectors of steam vessels after an examination covering knowledge of the rules of the road, ability to distinguish colors, general knowledge of motor engines and machinery and of the navigation of waters in which the vessel is to be used.

(e) The certificates of approval and the licenses of such operators shall be kept on board while such vessels are carrying twenty or more passengers, and shall be exhibited on request of any officer concerned in the enforcement of the navigation laws."

From the wording of the amendments it would seem to us that this legislation is not only just, but is very much needed. We don't see any reason why one who pays his fare for a passage on a motorboat should not have the same protection as one who pays his fare for passage on a steamboat. There is no reason why anyone, merely because he owns a motorboat, is privileged to overload it, to operate it when the hull may be in an unseaworthy condition and the engine unfit for service, or to put in charge of operators deficient in knowledge of the rules of the road, or the handling of a boat. Yet this is what is happening right along and the inspectors have no jurisdiction over the number of passengers carried on boats under 65 feet in length, or the condition of the hulls, provided they carry a life preserver for each passenger. These captains or operators, however, should be fully guarded as to the scope of the examination they should be required to pass; and this examination should only be such as to show fitness to operate the boat and not require any stated length of service or technical training. The examination should not be left to the whim of the various local inspectors but should be most clearly defined. As a general rule, a man that is carrying passengers for commercial gain should safeguard these passengers, whether he operates a motorboat or any other kind of craft. If these proposed laws are drawn and administered in the spirit indicated by these bills we do not believe that they would prove a hardship for the motorboat owners.

The New

Waterman PORTO

An Engine with a Thousand Speeds

Stop your boat in half its length from top speed, at a touch of the control lever. Dock without slowing your engine. Troll at any speed with any type or size of boat. With the

NEW REVERSING PROPELLER

you have more perfect control than an automobile. **Simply shift the lever** to the right speed and set the friction. No fixed notches in the quadrant to spoil perfect adjustment, when 1-16 of an inch in either direction (half the width of a notch) may mean a difference of a mile an hour in your particular boat.

Our 1915 model also carries the essentials which have made the Waterman Porto the leader for more than 9 years and have given 30,000 users unqualified satisfaction.

Three H. P., weighs 65 lbs. Has automobile carburetor; removable bearings, solid bronze skeg, 10½ inch propeller. Steers by rudder from any part of boat. Water cooled exhaust manifold, noiseless under-water exhaust, spun copper water jacket, high tension magneto. **Aero Metal piston and connecting rod.** Guaranteed for life.

1915 Model With Reversing Propeller and Multiple Speed Control

Demand these essentials or you will not be getting full value for your money.

Write for free Marine Engine Book containing full information on our complete line of engines.

WATERMAN MOTOR CO., 203 Mt. Elliott Ave., Detroit, Mich

390 Commonwealth Ave., near Massachusetts Ave. car lines and subway station. In the cool, quiet section, yet but six minutes from everything.

The Distinctive Boston House

Some globe trotters have been good enough to say that the Puritan is one of the most homelike and comfortable hotels in the world.

Single rooms from $2. Double room with bathroom, two persons $4 to $6. Combined sitting room, bedroom and bathroom for one, $4, for two, $5 and $6. Self-contained suite of sitting room, two double bedrooms and bathroom for two or more persons, $9 to $15.

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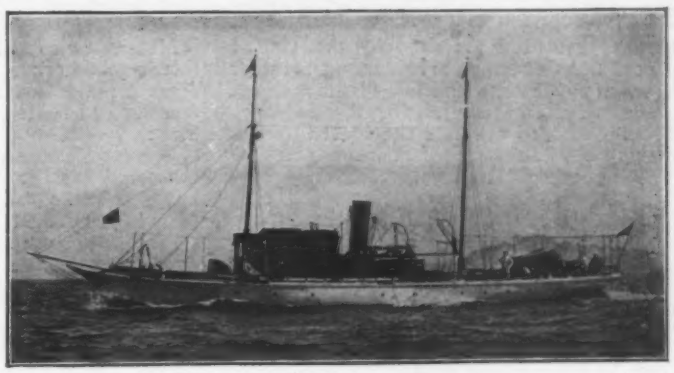

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Driftwood from Alongshore

Inside Route Pilot for New Jersey

There has just been prepared by the United States Coast and Geodetic Survey, Department of Commerce, a publication entitled "Inside Route Pilot, Coast of New Jersey," for the guidance of those who wish to navigate the coast in small craft, making use of the protected inside passages as much as possible. It covers the inside passages along the coast of New Jersey, and contains descriptions of the navigable waters in this region, with directions for navigating them, information concerning the port facilities, places where supplies and fuel can be had, where repairs can be made, tidal data and much other matter usually contained in a coast pilot. The charts at the front of the book show the through route, and are inserted for the purpose of making the directions more easily understood.

The volume embodies the results of surveys and special investigations by the United States Coast and Geodetic Survey, the Corps of Engineers, and the State of New Jersey Department of Inland Waterways. The information was gathered and compiled by L. A. Potter, nautical expert, under the direction of H. C. Graves, nautical expert, chief of the Coast Pilot Section, in the office of J. J. Gilbert, Inspector of Hydrography and Topography.

This publication serves the purpose of opening to the public routes heretofore not generally known. It should be especially useful to the owners of yachts, motor boats and other small craft in this locality. The volume, which is durably bound and of convenient size for carrying in the pocket, is on sale at the office of the Survey in Washington and at the agencies of the Survey at the principal seaports of the Atlantic coast at the nominal price of 20 cents.

The Block Island Races

The annual Block Island races for power and sailboats will be held on June 26 and 27. The sailboats will start at 11 A. M., the starting line being east of Whortleberry Island. The finish will be at West Harbor, Block Island, distance 100 nautical miles. There are no restrictions as to crews and light sails, and the race is open to decked or cabin boats in cruising trim from 20 to 35 feet waterline length. Time allowance is based on the over-all measurement, ten minutes being the allowance time for each foot of over-all length for the course, while yawls and auxiliaries receive 5 per cent additional.

The power boats start at 5 P. M., and go over the same course, and will race under the 1915 American Power Boat Association time allowance rules. It is open to cruisers of Division I of less than 50 feet over-all length, whose rating is not less than 32. A special race for the Lipton Viking Trophy will also be run in conjunction with this race over the same course.

Entries for both events should be sent to H. A. Jackson, Jr., chairman of the regatta committee, 409 Pearl Street, New York.

Handbook on Yacht Racing Rules

Messrs. H. de B. Parsons, Joseph M. Macdonough and Frederic O. Spedden have collaborated in getting out a very useful book for American racing yachtsmen, entitled "A Handbook on American Yacht Racing Rules."

This book is a clear and concise explanation of the meaning and application of the racing rules and contains a number of important protests and committee's decisions.

Each racing rule is given in full and the various paragraphs of the rules are amplified and explained. The chapter on series racing for points compares all the methods for scoring that are in use by the principal clubs. The chapter on instructions to measurer will aid many in making correct measurements of yachts. The book will greatly facilitate the work of race committees.

This book should be in the library of everyone interested in yachting.

Recent Yacht Sales

Messrs. Cox & Stevens report great activity in their yacht brokerage department, particularly as regards motor boats and auxiliaries, the following transactions having recently been effected by this firm:

The 115-foot steel auxiliary yacht Savarona, chartered for her owner, Mr. C. Howard Clark, Jr., of Philadelphia, to Col. C. L. F. Robinson, of New York Yacht Club; the 98-foot steel twin screw cruising power yacht Joyeuse, designed by Messrs. Cox & Stevens for Mr. Henry W. Savage, sold to Mr. Arthur H. Marks, of Akron, Ohio; the 90-foot twin screw motor houseboat Zianetta, sold for Dr. Charles Van Bergen, of Buffalo, to Mr. Charles M. Swift, who will use the boat on Lake Champlain and adjacent waters; the 90-foot seagoing yacht Viator, designed by Messrs. Cox & Stevens, chartered for Mr. Merrill Hunt, of Boston, to Mr. Walton Ferguson, of the N. Y. C. Mr. Ferguson has recently sold, through the same agency, the 170-foot steam yacht Christobel, and Viator, being a sea-going craft and having excellent accommodations, he anticipates that he will have equally good service, although she is much smaller than his former vessel.

The 80-foot twin screw power yacht Igloo has been sold for Dr. F. T. Rogers, of Providence, R. I., to Mr. A. W. Thompson, of Baltimore, Md., for service on Chesapeake Bay.

The 70-foot twin screw motor houseboat Cocopomelo has been chartered for Mr. Benedict Crowell, of Cleveland, to Mr. H. N. Baruch, of New York; the 60-foot bridge deck motor cruiser Dido, sold for Mr. H. T. Emmons, of Boston, to Mr. William S. Hilles, of Wilmington; the 40-foot auxiliary yawl Lucinda, designed by Messrs. Cox & Stevens, sold for the estate of H. Van Wagenen, Jr., to Mr. Thomas Williams, of Lawrence, L. I.; the 45-foot power boat Wilton has been chartered for a portion of the season to a New York yachtsman.

The 38-foot over-all auxiliary yawl Norma has been sold for Mr. C. I. Crocker to Mr. Clayton McMichael, of Philadelphia, and a 25-foot stock speedabout has been sold for the Gas Engine & Power Company to Mr. Finley Barrell, of New York.

The above list of transactions consummated by one firm in a short space of time shows that notwithstanding the disquieting conditions there is at least as much interest in general yachting in America as under ordinary circumstances.

Messrs. Cox & Stevens also report that their designing department is unusually busy, two large steam yachts now being under construction from their designs and under their supervision, and they anticipate letting contracts shortly for several houseboats and motor cruisers for delivery in the fall, as well as several vessels for commercial purposes.

The twin screw gasolene yacht Thelma has just been sold by M. F. Plant, Esq., to F. W. Vanderbilt, Esq., N. Y. C., through the office of Stanley M. Seaman, 220 Broadway, New York City. Thelma is a high-grade steel yacht of the express type, 138 feet over all, 16 feet 4 inches beam, 4 feet 9 inches draft, and was built by Charles L. Seabury & Co. in 1911. She is fitted with two 300-horsepower Speedway motors, giving a speed of 20 miles per hour.

The Hollis Burgess Yacht Agency has sold the 50-foot motor boat Ruth for J. Frank Turner, of New York, to Frederick S. Moseley, of Boston. The same agency has sold the 50-foot power boat Davy Jones II, owned by Holman F. Day, of Portland, Me., rear commodore of the Portland Yacht Club, to Arthur R. Shannon, of Boston, and the 40-foot motor boat Thorne, for Daniel C. Roberts, to James E. Pugh, of Providence, R. I.; and has chartered the 45-foot waterline auxiliary schooner yacht Rodina, owned by David C. Percival, of Boston, to Andrew G. Preston, of New York.

Lloyd's Register of Yachts for 1915

The new volume of Lloyd's Register of American Yachts for 1915 shows little difference in outward appearance from its predecessors, but an inspection of the book discloses many interesting changes. The number of yachts listed is practically the same—just under 3,600—within the limits of the United States, Canada and the West Indies. The oldest yacht in the list is the schooner America, winner of the Royal Yacht Squadron Cup (now known as the America Cup) in 1851. Though not recently in commission, the old craft is afloat and carefully tended, being still in seaworthy condition. In this connection it is interesting to note how few of the younger yachts associated with the defense of the Cup are still in the Register—Priscilla, built in 1885; Colonia (now Corona), built in 1893; Columbia, built in 1899, and two of the defending fleet of last year, Resolute and Vanitie. The other of this trio, Defiance, is missing from the list, the hull having been dismantled and sold for use as a houseboat. Most of the yachts famous in connection with the Cup have passed out of existence, only a few being still afloat in fishing or commercial service.

One historic yacht which is missing this year is the old schooner Dauntless, kept afloat for many years past in memory of the late Commodore Colt, but sunk last winter in the Connecticut River and finally broken up.

The additions this year are largely power cruisers of the raised-deck type, in all sizes from 30 feet to upward of 100 feet; this class including a number of the V-bottom type perfected by Mr. William H. Hand, Jr. Three of these—Raccoon, Romany (entered under the proposed name of Reverie) and Wakonda—range from 47 to 5[illegible] feet in length, with a breadth of about 10 feet. All are heavily powered, one with two six-cylinder engines, and as an experiment in the combination of high speed and accommodation they promise to be most interesting.

How many clubs there are within the geographic limits of the Register is an open question. There are listed this year 567 yacht clubs and 4[illegible] miscellaneous organizations, associations of clubs, trade organizations connected with yachting, the Waterway Leagues of New York and New Jersey, which are doing so much for the protection of waterways and the advancement of cruising, and the new United States Power Squadrons. The records of the Register show more clubs to the number of over one hundred which it has been impossible thus far to locate definitely.

No charge is made for the publication of the particulars of yachts and clubs, and an invitation to enroll in the Register is sent to one or more officers of every club whose existence is reported. The club and association burgees number 648 in all, making sixteen handsome color plates, and 28 more plates are devoted to the 1,800 private signals of yachtsmen.

The Register will be shipped, postage paid, on receipt of order, the price being $8.50 for the blue cloth edition and $7 for the canvas edition, with a reduction in each case of one dollar to those who were entered as regular subscribers in 1914. The book is published by Lloyd's Register of Shipping, 17 Battery Place, New York City.

Waterway League to Entertain

The Waterway League of New Jersey will hold its annual carnival at the Pavonia Yacht Club on July 24 and 25, 1915. Members of the Waterway League of New York are invited to attend. This affair will be one of the largest ever undertaken by the New Jersey League.

The invitation extended by the New York League to the New Jersey Waterway League has been accepted and August 28 and 29, 1915, have been set as the days for the visit. A committee to take charge of this affair has been appointed, the plans are already under way, and the committee is hustling to make this one of the biggest events in yachting circles.

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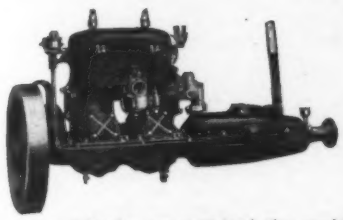

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Complete Salt Water Outfit, $120.

11 H. P. Double Cylinder. Bore, 4¼ inch; Stroke, 4¼ in. Complete Fresh Water Outfit, **$148**
Complete Salt Water Outfit, $160.

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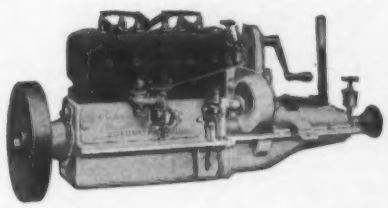

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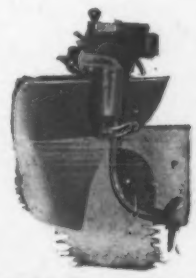

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New Rochelle Yacht Club News

The annual regatta on June 12 was one of the most successful in the history of the club and brought together a large fleet. This was the thirtieth annual regatta of our association, the club being organized 1885, incorporated 1886, and a regatta being held every year since that date. A fleet of sixty-nine boats started under good racing conditions. The following are the winners in the various classes:

"P," Anita; "30's," Okee; 1st Div., Amada; 2d Div., Ariel; "R," Joyetta; "L. I.," Hamburg II; 3d Div., Robin Hood III; yawls, Lady M., Petrel; Sonder, Junior II; Manhasset Bay, Mlle. Boss; Jewel, Catseye; "S," Ogeemah; Star, Neptune; N. R. one-design, Nereid; Orienta Class, Teal; dories, Tautog.

The regatta committee, consisting of George Malloy, chairman; H. W. Patterson and D. Ed. Dealy, were on deck and up to their eyes in work, and the results showed the carefulness with which preparations had been made. An entirely new form of instruction sheet had been prepared which greatly simplified matters for the skippers at the start. Instead of the confusing red, blue and white balls that are supposed to indicate the class that starts, the yachts were divided into twelve divisions, each division being designated by a number. The divisions were grouped together in accordance with the number of the course which they sailed. The yachts were then started by numerical divisions in regular sequence, the signal for each division to start being the hoisting of a yellow cube with the black numeral, easily read, corresponding to the division number that was to start, attention being called to each signal by a gun. We should not be surprised if many of the regatta committees adopted this system in the future.

The first of the Wednesday evening dances was held on the evening of June 9, and brought out over 150 members and their guests. A special dinner was served at the club house, during which a cabaret performance was in progress followed by dancing.

Special club events for the following month are as follows:

June 30—Wednesday evening dance.

July 5—Illumination of grounds and fireworks in the evening; special table d'hote dinner and dancing.

July 10—Stratford Shoal race for sailboats—open.

July 14—Special ladies' day; table d'hote entertainment and dancing in the evening.

July 28—Shore dinner with entertainment and dancing.

July 31—The start of the club cruise or race week, whichever event is decided upon.

"Bill" King has found a boat to suit him in his recent trip down East, and she is now lying at moorings off the club. Her name is the Santee, and she is a 50-footer, built by the Luders Marine Construction Company. Brother King will now be able to go to Lloyd's in comfort. George Granbery's Anita has at this writing cleaned up in all of the Class "P" races where she and Amoret have come together, while Commodore Mahlstedt's Okee has again started in on her winning career, and at this writing has already annexed two races.

Everybody is wondering where Captain Marsland's new dink float has gone to. Some believe her crew mutinied on her way to Echo Bay and stole the ship. Those that have dinks are anxious to see the float arrive.

In the easterly blow which lasted three days of the week of June 6, three or four boats parted their moorings and went up on the beach on the westerly side of the harbor. Most of them were not owned in the club and they were subsequently gotten off with more or less damage.

The dinner of the Lloyd's Harbor Club on May 28 was a great success. At 11:30 the members hustled aboard their boats, made sail, and at 12 o'clock were started on their midnight race to Lloyd's. The air was very light, and under Target Rock most of the boats got becalmed shortly after daylight. The winner was Anita.

Harlem Yacht Club Affairs

On the night of May 28 the club house of the Harlem Yacht Club was completely destroyed by fire. The cause is unknown, and despite the efforts of the City Island fire department, assisted by the Westchester company, the building was a total loss. Several boats which were in the yard had a narrow escape, and the fact that they were saved is due to the efforts of the boatman. Outside of the loss of the building the losses of the members were considerable. The sail lockers on the upper floor of the building and the lockers on the basement floor contained a vast equipment of sails, fittings, etc. Ex-Commodore Frank Sullivan was particularly unfortunate, since he had stored in his locker a great collection of cups and other prizes won by the Mopsa, all of which were lost.

The club is to be congratulated upon the personnel of its Board of Directors. Plans are already matured for building a new club house, which will be a decided improvement upon the old one, and is designed to provide proper winter as well as summer accommodations for the members.

In furtherance of the new club house, Thomas Fleming Day kindly volunteered to deliver a lecture upon his experiences in crossing the Atlantic in Sea Bird. The lecture was given June 19 at Thwaits' Pavilion at City Island, and the proceeds are to be devoted to the building fund. Unfortunately, this issue goes to press before we have an opportunity to report this lecture, but from present indications it is bound to be a great success. The club will not forget Mr. Day's kindness.

A report reaches us from Sea Cliff that a delegation from that haven, headed by Commodore Wilson, of the Cliff Motor Boat Club, will attend the lecture, the Commodore's handsome motor boat to furnish the means of transportation. Included in the party is Capt. George Tilley, the yacht racing oracle of Sea Cliff.

While the fire caused the withdrawal of many entries for the club's annual regatta on Decoration Day, the regatta was a decided success, and speaks highly for the ability and "get there" spirit of "Ed" Tucker, chairman of the regatta committee. Mr. Brenzinger's power boat Marie B. was the committee boat. Fifty-two boats crossed the line, after several postponements, due to a "Paddy's hurricane" which was raging at the time scheduled to start, but finally the boats were sent away to a light easterly, which speedily shifted to an almost imperceptible westerly wind.

After about an hour of drifting before the westerly zephyr a good old southwester came up and joy reigned in the fleet.

The after deck of Marie B. was graced by the presence of our old friends "Joe" and "Rudy," who, report hath it, lost several priceless manuscripts in the fire. Commodore Krausman cruised about in Zio and an elegant pair of flannels, the survivor of the disastrous fire.

We are pleased to note that District Attorney "Tom" Press has again taken up racing in his Manhasset "twenty" Mahaska. "Tom" was a keen competitor in the New Rochelle regatta, and we attribute his failure to win to the lack of that "inspiration" about which we have heard him talk recently. Billy Lindermann's Mlle. Boss was the winner. H. T. Hornidge's Peg lost in the 3d Division handicap class by the narrow margin of one second.

The club rejoices that Lieutenant Dick Coleman's houseboat cat "Theodore," though much scorched, survived the fire and looks good for another season. The month of May seems to have been an ill-omened one for the club. William Haywood's "P" Class Wianno was stolen from her moorings, and after a most extended search was discovered at Sachem's Head painted a dirty gray. Unfortunately the thieves were not discovered, but every effort is being made to apprehend them.

The following is a schedule of the racing events of the club:

June 20—Bay Handicap Race (closed to members of Harlem Yacht Club).

July 17—Harlem Day.

July 18—Bay Handicap Race (closed).

August 21—Stratford Shoal Race (open).

September 12—Handicap Race for Jarchow Cup.

We have received word from "Ed" Tucker, chairman of the regatta committee, that if sufficient entries are received two divisions will be created for the Bay races; also that the three races shall form a series, points being awarded on the Larchmont system. "Ed" has introduced a novel feature in announcing a "blind" handicap for the Bay race entrants. We take it that this means the racers will not know their handicaps until the series has been sailed. It is up to the members to support the regatta committee and make the Bay race series a decided success.

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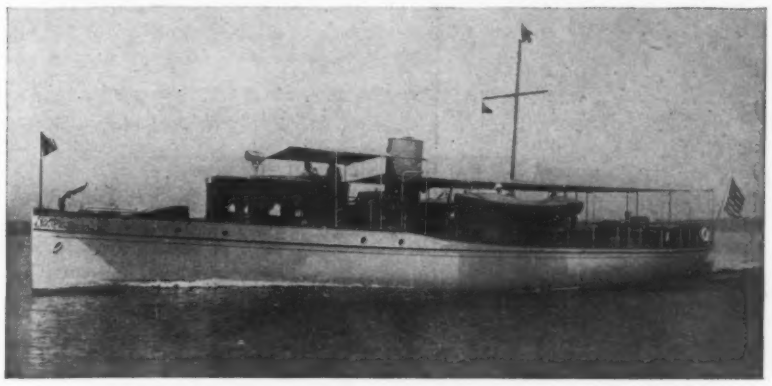

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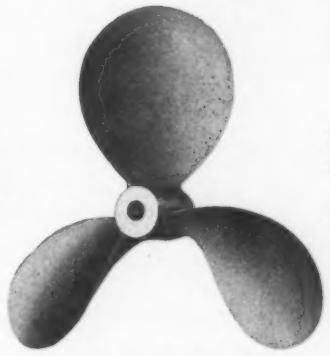

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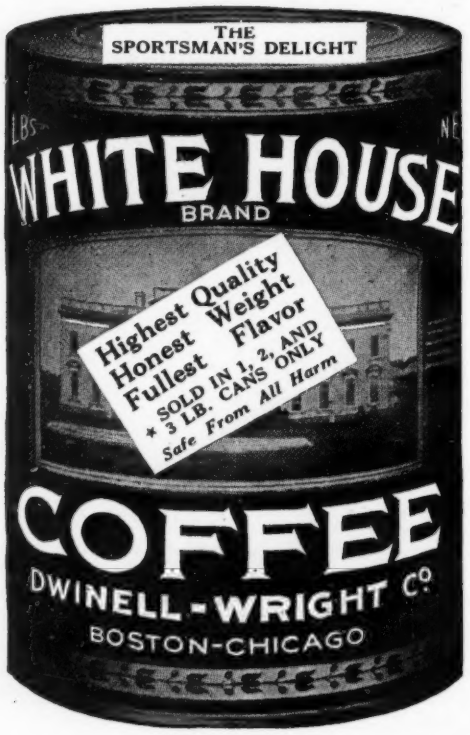

A Cruise to the Menai Straits

(*Continued from page 20*)

a few moments, as the fog prevented our judging the distance, which might have been only a few hundred yards. We sailed on, and, with startling abruptness, right into clear weather. The land was Ballyquintin Point N. of Strangford Lough entrance, and on coming about again we made out the S. Rock beacon, and, shortly after, the lightship. All outside and astern of us the fog persisted, clearly defined. I suppose the gun is not fired if clear in the immediate vicinity, but it would have been of great use to us. Evidently the fog had never got within six miles of the lightship, the northerly breeze having crowded it back.

The wind became very much stronger, so that we hove-to and pulled in a reef. A little later, seeing that it was a dead beat, and the tide turning against us, we determined to run back to Ardglass, where we arrived at 11 A. M. on Monday, still clear inshore and fog outside. The little harbor was chock-full of fishing craft—steam, motor and sail—and the manner of our mooring, I think, was ingenious, and seemed to interest the fishermen. The wind being northerly, we dropped all sail as we came in and let go the kedge near the mouth of the harbor, taking a warp from the port bow to the cage on the rock, thus leaving a passage for the fishing boats going out on our starboard hand. We had, however, to shove off more than one of the sailing boats, and work our breast rope during this process. By two o'clock the harbor was again empty.

Tuesday, 12th August

With a fresh N.N.W. breeze and single reef we made a rapid passage up the Firth of Clyde until off Portpatrick, which we just managed to fetch in one tack, assisted by the ebb, the sea being rather heavy all through. The wind failed us here at a critical time and place, where, if caught in the flood tide, we might have drifted back to the Mull, but fortunately it came again, so that 7 P. M. found us under Pladda Island, and we made Lamlash anchorage comfortably by 11 P. M., being delayed by the usual calm under the island.

The next day, 13th August, we sailed to E. Loch Tarbert in a slashing breeze, the last we had, as a week of windless, though otherwise delightful, weather succeeded, spent not unprofitably sailing about Loch Fyne in the company of Tom Erskine of the Whimbrel, a Belfast yacht (nine tons), which we met here for the second year in succession. A more ambitious cruise up the West Coast had been contemplated, but the anticyclonic conditions and lateness of the season altered the plan. I had also decided to install a motor for next season, so laid up the yacht on 21st August with Dickie, of Tarbert, and returned to Dublin ingloriously in a "coal burner," my crew having shipped on Whimbrel for the passage home *via* Belfast.

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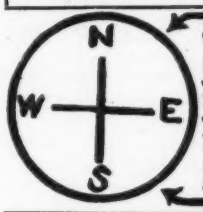

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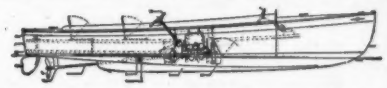

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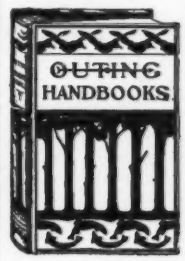

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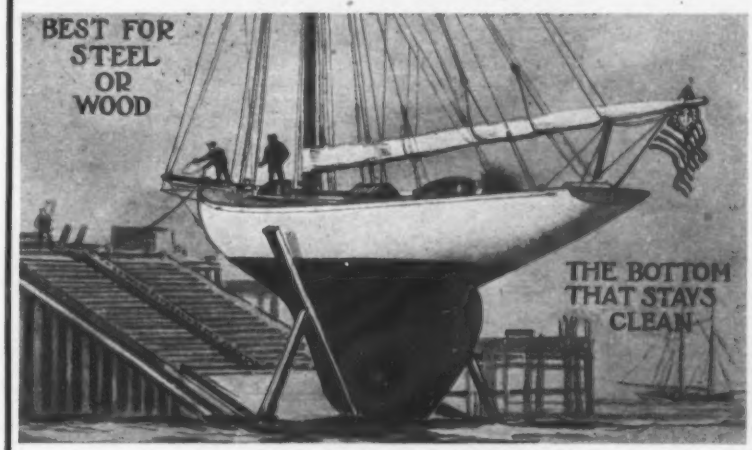

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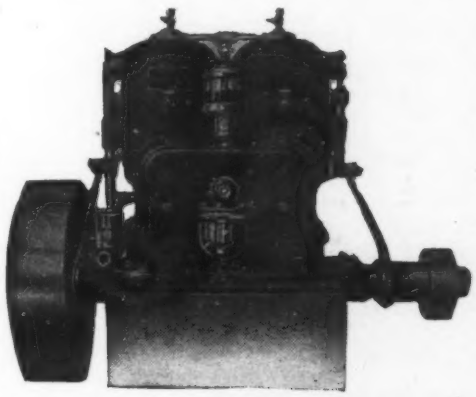

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